

J-O-A-N D-U-W-V-E, M.D., M.P.H., having been first duly sworn to tell the truth, the whole truth and nothing but the truth relating to said matter, was examined and testified as follows:

DIRECT EXAMINATION

QUESTIONS BY G. BARON COLEMAN

Q Ms. Duwve, am I pronouncing that correctly?

A Yes.

Q My name is Baron Coleman. And you might notice my accent. I am originally from here. So I'm in moderately friendly territory here. But I've been gone for a little while. I picked up this outrageous accent. If over the course of the day, if you hear anything that I ask and don't understand what I'm asking, if I use vernacular terms and you say, no, no, no, medically we say this, please stop me.

A OK.

Q Please feel free to jump-in, chime-in any time you want.

A OK.

Q If you need me to reword a question, by all means. But I will ask you if you answer a question, can I assume you understood the question?

A Um, I guess we'll see. If I'm in the middle of answering a question, and I can rephrase it. Just because I start answering a question doesn't necessarily mean I understood it. Sometimes my brain takes a little bit longer to catchup.

Q And there are no time limits to answering a question. And if you need to sit and think, I mean it comes out on paper, I don't think she's gonna put, the Deponent thought for forty-five seconds. That's one of the very things about the deposition, you can sit for forty-five minutes and think and you look like a genius. But at some point, if you give an answer and it's complete and you then move on and we go on to the next topic, can I assume that you understood what you were asked, or at least in the way you answered it?

A I'm not sure how to answer that, because I think there are many cases where you think you heard one thing, but what you heard was something else. Family counselors make a lot of money doing counseling work.

Q My wife does.

A Exactly.

Q Do you have a copy of your CV with you? I have a copy that was sent to me.

A I don't have a copy with me.

Q Would you review this and make sure this is what left your office and your CV. I've not made any additions, corrections, or anything to it. Not your CV. I'm sorry. Your affidavit.

A Oh, I do have a copy of my affidavit.

Q You don't have a copy of your CV with you?

A No.

Q If this is what was sent to me as your affidavit, can we go ahead and mark this as Defendant's Exhibit 1?

A Sure.

Q And I'll submit that. What else did you bring today?

A I just brought some background research that I had done.

Q Let me see what you have.

A I have lots. I have my affidavit. I have Rodney's affidavit. I have lab results. I have articles. I have a bunch of articles.

Q Now when you say "articles," are you talking about articles about [REDACTED]

A No. I have not done any of my own research on Tony [REDACTED]. The only thing I have about Tony [REDACTED] came through Doug, or through our office of HIV/STD.

Q Since you don't have a CV, let's sort of do it orally.

A You have a copy, Doug, don't you? I sent it to you.

DOUG CUMMINS: You did. I will look. I do.

Q Let's go through it orally anyway.

A Sure.

- Q Where did you do your educational background? Starting with college and working all the way through?
- A I have an undergrad degree in Middle Eastern Studies from Ohio State University, with a minor in French. And I have a master's degree in public health.
- Q Where did you get that from?
- A From the University of Michigan. And I completed my pre-medical requirements at Hunter College and the University of Toledo, because I was not a science undergrad. I had to do chemistry and biology and physics. And while I was continuing to do public health work, I worked internationally. And then I was accepted at Johns Hopkins School of Medicine. I graduated with my M.D. in 1994.
- Q And where did you go after you graduated with your M.D. in '94?
- A I went to St. Vincent Hospital and Health Care Services in Indianapolis, and I did a family medicine residency.
- Q And you wrapped your family medicine residency in what year?
- A In 1997.
- Q Where did you go from there?
- A Then I practiced in a rural community, Public Health and eventually moved back to the Carmel area and practiced. And I was practicing for eleven years and then I came to the State Department of Health.
- Q So that would put it in '08?
- A When I came to the State Department of Health, yes.
- Q What other job titles have you held at the State Department of Public Health?
- A I am the Medical Director for Public Health and Preparedness for the State Department of Health.
- Q And all of your private practice experience in advance of going to the Department of Public Health was in family medicine, is that correct?
- A That's correct.
- Q What kind of things did you do in family medicine?
- A Prenatal to adults. I took care of babies. I took care of, did pediatric

visits. Did adult visits. Managed chronic diseases. Did everything. Office procedures. That's what we do in family practice.

Q And I'm submitting here Defendant's Exhibit Number 2. Is this a copy of your CV?

A Yes.

Q Talk to me about your HIV experience before going to the Department of Public Health? What experience did you have specifically with HIV or AIDS?

A Specifically when I was in medical school, Johns Hopkins is located in the heart of East Baltimore. Which is a very high prevalence HIV/AIDS community. When I was there, about twenty-five percent of the population going through the emergency department at Hopkins was HIV-positive. We cared for many HIV patients when I was in medical school. And cared for a few patients. Indianapolis is not as high of a prevalence area, but during residency also.

Q When you say, "cared for," what do you mean by that?

A Cared for them while they were in the hospital.

Q What kind of things would you do when you're caring for someone who's HIV-positive in a Baltimore hospital?

A You would treat what they were admitted for.

Q I guess specifically I'm asking, were you giving HIV tests? Were you giving antiretroviral therapy? Were you treating opportunistic infections? What types of things were you doing yourself, not the clinic set-up, that you in particular?

A Right. Well, as a medical student and a resident and a primary care doctor, HIV testing is what we do. Taking care of patients in the hospital was treating opportunistic infections. I am not an infectious disease doctor. I don't chronically manage, or don't manage on a regular basis, patients who are HIV, or AIDS infected. Is that's what you're getting at.

Q In your private practice, when you're doing primary care, what HIV experience did you have?

- A Assessing patients for risk factors. Testing. Counseling about prevention. And referring those who have had positive tests to infectious doctors for treatment.
- Q Did you ever make any diagnosis either in Baltimore, or as part of your private practice in Indiana?
- A Positive screening, ELISA and then referred.
- Q And we'll get into the definition of some of these later, to kinda clear-up the record. Your experience in private practice was limited to giving an EIA test and then referring out if you got a reactive result, is that correct?
- A Yes.
- Q Did you ever do any followup care, manage medications for HIV-positive patients?
- A No.
- Q Once someone had a positive, or excuse me, a reactive result on a EIA test, you referred them out and never saw them again?
- A No, that's not true.
- Q OK. Talk to me about what you did?
- A In primary care we follow patients. So I would have seen them for upper respiratory infections. For managing chronic conditions, diabetes. Cardiovascular diseases.
- Q So it would be like, if someone had diabetes you might refer them out to a specialist to handle the diabetic care, and then you would handle, if they stubbed their toe and came in, something like that?
- A I don't think that's a good comparison.
- Q Did you ever alter people's medical treatment?
- A No, not their HIV treatment.
- Q You let an I.D. doctor handle all of that?
- A Yes.
- Q Did you have particular I.D. doctors you used routinely, or did you just send them to a clinic, or hospital?
- A It probably would depend on their insurance.

Q When were you first asked to get involved in the Tony [REDACTED] case?

A Maybe a month and a half ago.

Q And how were you asked? Was it a letter that showed up in your mailbox? Were you called on the phone?

A I believe it was through our HIV/STD division. Having, I guess they heard from Doug. No, no, it was from legal.

Q It was from what?

A From our legal division. I guess our HIV/STD division contacted our legal division, saying we need to provide a witness. Then I was asked to do it.

Q So Doug didn't actually contact you, your legal department contacted you?

A No, I wasn't contacted initially by Doug.

Q And what were you asked to do?

A I was asked to prepare an affidavit.

Q And is Exhibit 1 that we talked about a moment ago, is that the affidavit that you prepared?

A Yes.

Q What were you asked to put in the affidavit? What was your specific task? Prepare an affidavit that says what?

A I was given Rodney, what's his last name?

Q Richards.

A Richards' affidavit. And I was asked to prepare an affidavit responding to Rodney Richards' affidavit. I wasn't asked anything specifically.

Q And did you consult with the legal department, or the investigators with law enforcement at any point from the point you were asked to prepare the affidavit, until we're sitting here today?

A No.

Q Were you given any additional instruction by the legal department, any lawyers, any investigators, any police officers?

A No.

Q So today when you see Doug, this is the first time you've had a

conversation with anyone in law enforcement since you were asked to prepare the affidavit?

A No, that's not true. I prepared the affidavit. I submitted the affidavit.

Q With whom did you submit it?

A I submitted it to Doug. And I believe he had sent an e-mail to our HIV/STD division saying, you know, do we have this, is it done yet? They told me to submit it to him. And after he received it, he contacted me.

Q And what did he say when he contacted you?

A He said, let's meet and talk about what gonna happen.

Q And what did you guys talk about?

A He told me that you would be here.

Q Me by name? Did you know that I was gonna be here by name?

A Yes. He told me about Dan. He told me that he would be deposing Rodney Richards. Then he said, here's some questions that you might be asked.

Q What questions did he say you might be asked?

A I don't recall.

Q Was there a list?

A No, no. It was all done verbally.

Q And when was this?

A It was after I got back from Hawaii.

Q In the last week?

A No. Two weeks ago.

Q Was that the only conversation you've had with law enforcement, or your legal department, or any other lawyers about this case?

A Our legal department was there. They're not very helpful. Just moral support. I'm sorry. No, they're very helpful in many respects. But, no, I did not consult them.

Q So is it fair to say that what we've just kinda rehashed is sort of the extent of your conversations with the outside world in preparing for this? I understand that you may have done some research and things like that

to prepare the affidavit. But in terms of input from outsiders, this is all that you've talked about to prepare for this deposition?

A I wouldn't even know who to contact in the outside world.

Q And have you talked to anybody since the meeting with Doug?

A No.

Q Have you ever served as an expert before?

A Once.

Q When was that?

A That was in, I don't remember exactly the year, but I'm gonna guess. Probably 2006.

Q And what was that case involving? Just briefly.

A Asthma.

Q Asthma?

A Yes.

Q Were you serving, was it a civil case, or a criminal case?

A It was a civil case.

Q And were you serving for the plaintiff, or the defendant?

A I'm really not sure who was who to be honest with you. It was a child custody case.

Q Did you receive pay for that case?

A I did.

Q Are you receiving pay for this case?

A No.

Q Would you consider this part of your official duties in your capacity?

A Yes.

Q And what is your official title?

A Medical Director for Public Health and Preparedness.

Q And is Public Health and Preparedness, is that a subdivision of?

A The Indiana State Department of Health.

Q Are you the director of the Department of Public Health, or just a subdivision of it?

A So the State Department of Health has a Health Commissioner. That is

not me.

Q That's what I was getting at. How many HIV affidavits had you prepared before this one?

A None.

Q Have you gone to any specialized schools, or training, or taken any classes, or done any CME credits on HIV?

A Can we take those one at a time?

Q Sure. Have you gone to any specialized schools for HIV?

A No.

Q Have you taken any classes?

A Schools for HIV. In medical school it's part of what we do. So I think it would be fair to say that HIV, in terms of education and continuing education, is an important component of primary care and caring for patient population. Were the classes tailored, did they only talk about HIV, no.

Q That's what I'm getting at. Have you taken any courses that were HIV courses?

A No.

Q Have you taken anything after graduating medical school that is an HIV specific class, or seminar, or anything like that?

A No.

Q Have you taken any CME credits dedicated to HIV?

A Probably. When we do CME credits we do journal articles. We get hours for doing journal articles. Over the past fourteen years, I'm sure I've done something specific to HIV. Could I tell you when and what, no.

Q As far as your official duties now, what do you do that involved HIV at the Department of Public Health?

A As part of my medical directorship responsibilities, the Department of HIV/STD is a program that I work with.

Q And what is their function? Is it monitoring, assessing, treating?

A I don't know that I can tell you the full scope of what they do. I know

that they provide testing and treatment and resources and special counseling. Then we have someone who monitors and enforces duty to warn. We are repository for lab results. We have a perinatal HIV program called, One Test. Two Lives. Which I've been involved with. I'm sure there's more.

Q And what percentage of your annual work is dedicated to working with that part of your agency?

A Annual work?

Q Or what percentage of your duties are dedicated to dealing with that particular issue?

A It depends on what specific projects they have and they ask me to be involved with. So I've actually spent quite a bit of time recently working on expedited partner therapy for partners of patients with gonorrhea and chlamydia. And work with our medical licensing board. And work with our STD clinic and work with other STD professionals. So that would fall under that division. I was asked to help with the One Test. Two Lives. campaign.

Q One what?

A One Test. Two Lives. That's our perinatal HIV screening campaign. When I'm asked to do something, it can take, you know, five hours, twelve hours. Depending on what I'm asked to do. And then preparation for this deposition, of course, I spent many days. But that wouldn't be, I wouldn't necessarily do that every year. It would just depend on what I was asked to do.

Q Is it more than half of what you do for your career, HIV?

A Since I have started?

Q Correct.

A No. Is it more than half, has it been more than half of what I do for the past two months, yes.

Q I'll leave it at that. This affidavit that we've marked Defendant's Exhibit 1, you've identified as the affidavit you prepared in response to Dr. Richards' affidavit. Do you have a signed copy anywhere? The copy I

have was never signed.

A I don't. Did I give you a signed copy?

DOUG CUMMINS: I don't know.

A I think I just e-mailed it to you.

DOUG CUMMINS: Yeah, I don't know if I have a signed one.

Q What I have here is, twelve pages of full text and then it spills over on to the thirteenth page. Then there appears to a citations list, that spills over to the fourteenth page. And then I think a number of exhibits that have been attached, going up to 16d. There's no signature anywhere that I could find from you. But you are swearing, testifying that this is your affidavit?

A Yes, that's my affidavit.

Q Where did you get the information to put in this affidavit?

A I think the sources are cited. So multiple sources.

Q Did you use these sources in sort of like a research project and put it together, or was it a single source that provided the bulk of your research?

A I used the sources of sort of a research, prepare and research topic. There was the Insite source from the University of California, San Francisco, had great information. So I did rely on that source to point me in the direction of other papers that had been written and peer reviewed.

Q Just to clarify the record. Insite is, I-n-s-i-t-e. It's input on page 13. Did you have an assistant, or any research help, helping you put this together?

A No.

Q Let's just sort of take it little by little and we'll sort of expand. I'll use this as a roadmap. So if you have a copy, that will be great. You come right out and it looks like you open up talking about HIV being clearly identified as a primary cause of AIDS. And you cite two papers that proposition. It is footnotes 2 and 3. The Barre-Sinoussi and Gallo. Have you read those papers in-depth?

- A I have the first paper, the Barre-Sinoussi paper. That's when the HIV virus was first isolated. Yes, I read that paper. The Gallo paper, I have not, I have read it, but not in as much depth as the other one. The Gallo paper was significant for the discovery that HIV was the virus that causes AIDS.
- Q So it's your understanding that footnotes 2 and 3 clearly identify HIV as the primary cause of AIDS?
- A That is the understanding of the scientific in the medical community. In fact -
- Q Let me stop you right there.
- A You asked me if it was my understanding. I am a medical provider. So medicine as you know relies heavily on evidence based care and the diagnostic procedures. So the Montagnier paper, Luc Montagnier and Barre-Sinoussi were awarded Nobel Prizes for their research. Clearly this is the medical and scientific consensus. So those two papers actually set the stage. Yes. So that would be my opinion as well.
- Q I wasn't asking exactly about the medical community's understanding of HIV's role in AIDS. I'm asking specifically your understanding -
- A Well, I'm a medical provider and my understanding is based on evidence based, scientific research provided from peer reviewed sources.
- Q Let me get my question all the way out and we'll go a lot faster.
- A Sure.
- Q My question wasn't about the world of medicine and their view on HIV. My question was specifically with respect to footnote 2 and 3. When you read those, it's your understanding those papers quote clearly identify HIV as the primary cause of AIDS?
- A That is the understanding of the scientific -
- Q I'm asking your understanding of those two papers. Do you, Dr. Duwve, sitting here today, having read Barre-Sinoussi and Gallo's papers from '83 and '84, is it your understanding that those papers clearly identify HIV as the primary cause of AIDS? That's all I'm asking. We'll talk about the rest of this down the road. I promise.

A That is my understanding -

Q Of those two papers?

A Based on -

Q Of those two papers?

A When you practice medicine you're not a bench scientist. So I'm not an M.D./PhD. I am an M.D. And M.D.'s rely on evidence based peer review articles for, to help them guide their practice. So I think it would be wrong to say that I am a scientist who has expertise in lab science, who has reviewed those articles. And I won't be able to argue the science with you.

Q I'm not asking for the science. I'm asking if it's your understanding that those two papers make that claim? That's all I'm asking. I'm not asking you to evaluate the claim. I'm not asking you to talk about what other people have -

A That is my understanding. Yes.

Q That's what I'm asking. You say here, also on page 1, "HIV has been cultured and sequenced; it is a single-stranded RNA genome that is 9 kilobases in length and contains 9 genes that encode 15 different proteins." And you cite for that proposition footnotes 4 and 5. And I'm not gonna do this on every one of these.

A Thank God.

Q I just want to figure out where we're going here. Have you read those two studies at length? The Musing and Gallo studies and footnotes 4 and 5?

A As I said, I have not, I'm not a bench scientist. I have looked at the studies. But these are peer reviewed studies accepted in the scientific community.

Q So did you read those two studies 4 and 5? That's what I was asking.

A I have seen studies. I have not read them thoroughly.

Q Are you using, and I guess what I'm getting at here on footnotes 2, 3, 4 and 5 in particular, and that's as far as I'm going on the footnotes, are you citing these because you saw those cited somewhere else?

A Absolutely not. The, 2 and 3, that's medical history.

Q What about 4 and 5?

A We grew-up knowing that. And 4 and 5, yes, I mean those were, as I reviewed the literature, the National Institutes of Health, the Insite and Center for Disease Control, articles from science, that were published in science and in infectious disease journals, those are articles that have been cited. And if an article was cited, I went and found the article. If that's what you're asking me, and looked at it, yes.

Q I guess the reason I'm asking it on these four footnotes in particular is, having done a lot of these types of cases, I rarely get an affidavit from an expert with footnotes back to the original sources. That's unusual. I would probably say racking my mind, this is the first time I've ever seen it. Most people either don't provide footnotes to the sources, or provide footnotes to an article summarizing the original sources.

A Right. I wouldn't quote an original source without having looked at it.

Q So it's your understanding of footnotes 4 and 5, after reading it again, not evaluating the science, that sources 4 and 5 make the claim, either 4 or 5 makes the claim that HIV has been cultured and sequenced, that it is 9 kilobases in length, contains 9 genes, and encodes 15 different proteins?

A Yes. That's what those articles said.

Q That's what footnotes 4 and 5 said?

A Yes.

Q Not articles about 4 and 5?

A No.

Q Go to page 2 of your affidavit here and you have what looks like three separate diagrams. Where did you get these diagrams?

A From the National Institute of Allergy and Infectious Diseases,

Q From a book they produced?

A A Web site.

Q And this is their main NIAID Web site, is that correct?

A Yes. And I believe the, yes, it was from their Web site. I think this

one, I saw published in another paper, but where I got them was from the National Institute of Allergy and Infectious Diseases Web site.

Q Did you have the occasion to - I'm sorry, go ahead.

A That's alright. Go ahead.

Q While you were on the NIAID Web site did you click on the disclaimer button?

A No.

Q Have you read a disclaimer from the NIAID at all?

A No.

Q I'm gonna put this in as Defendant's Exhibit 3. Will you just review the bottom paragraph there of Exhibit 3. I'll represent that this is a disclaimer printed off in the last few days from their Web site. That's up-to-date. You've not seen a copy of that?

A I have not seen a copy of that, but it's not unusual for Internet, Internet sites don't dispense medical advise. And in fact, in Indiana we have a law saying that you cannot provide treatment without actually seeing a patient and talking to a patient, and examining a patient. That's very common in medicine. That wouldn't at all surprise me.

Q Let's start with, let's just take these diagrams one by one. Let's talk about this picture of HIV budding from an infected cell. Where on the Web site was that located?

A I don't specifically remember where it was located.

Q Did you find it through a Google search, or did you go to the Web site and use a site map? Do you remember how you found that picture?

A It may have been linked through another article. No, I don't remember.

Q Is this from Tony [REDACTED] this picture of an HIV budding from an infected cell?

A This, until Tony [REDACTED] has been published on the Internet. This is from the Internet.

Q So this isn't something specific to this case? This is something that you found on the internet, on the NIAID Web site?

A Right. We're just talking about HIV/AIDS. I think we talk about Tony

██████ later on in the affidavit.

Q Do you have a picture from Tony ██████ a slide, or an image like this one where HIV is budding from an infected cell in Tony ██████

A That's not routinely done to establish a diagnosis of HIV or AIDS. So I do not have one.

Q Why don't we have one?

A Because it's not routinely, it's not needed to diagnose, to establish a diagnosis of HIV or AIDS. This was used the scientific research. We don't take pictures of uh, microscopic pictures of diseases to diagnose them. That would be, you wouldn't be able to afford your medical insurance if we did that.

Q If Tony, well, we're not talking about diagnosing, we're talking about putting him in prison presumably for the rest of his life.

A I'm just talking about diagnosing him. The prison part is up to you.

Q Do you have the capability to get a picture like this from Tony ██████ if he wanted one? Could he come to the Indiana Department of Public Health, or his local physician and say, I want a picture?

A As I said, this is not a routine part of medical practice. This is science. Could I assume and spend a lot of money and hire somebody at a private institute and to do a picture like this, this isn't something that would routinely be done in the practice of medicine. No. You're blurring the role of bench science and medicine here. I'm reporting here the bench science. This is not medical diagnostic study.

Q I'm not asking for what is routine, or necessary.

A You're asking if he could get it done. I assume that it's possible, because we can take pictures of HIV budding. So I assume that it would be possible. How you would go about doing that, I don't know.

Q Have you ever seen this done on a patient that you've dealt with?

A As I said, it's not done routinely.

Q I'm not asking routinely. I'm asking for one specific instance ever?

A I'm not a scientist. I'm a medical physician.

Q I'm asking for your personal opinion as a physician, have any of your

patients ever had a picture of an HIV -

A I couldn't tell you that, I don't know if they've had pictures done for research purposes, but not for medical diagnostics. No.

Q We'll save a lot of time if you'll let me finish my question. That way I don't have to keep re-asking the same thing. Have you ever had any of your patients that you know of have a picture of HIV budding from one of their infected cells?

A As I said, I wouldn't know if they had that done for research purposes or not.

Q That you know of?

A That's not routinely done for medical diagnostic purposes. So the answer would be, no. I am a physician. I can't tell you what patients have had done in a research lab.

Q What's your understanding of the role of an affidavit? When you were asked to prepare an affidavit, what was your understanding of what was required of you?

A Having read Rodney Richards' affidavit, my purpose was to establish that an HIV and AIDS are evidence based diagnoses. Founded in good science and accepted by the scientific community, because apparently Rodney Richards has some doubt about that. Or he expressed some doubt in his affidavit. That there are tests that we can use to diagnose with a high degree of certainty, HIV/AIDS. And those tests are irrefutably accurate in a high risk population.

Q I'm not asking -

A You're asking -

Q What is the purpose of an affidavit?

A I'm not a lawyer. I don't know.

Q My understanding of an affidavit, and that's why I'm asking you, is because you wrote the affidavit. And my understanding of an affidavit is that you have personal knowledge of all the facts contained therein. That's sort of the standard where I'm from, of what an affidavit is. That you have personal knowledge of all the facts. And you're backing up

and taking a very global approach and citing other sources, in trying to set something up that way. Do you have personal knowledge that that is HIV budding from an infected cell on page 2? You said time and time again, I'm not a -

A The majority of the scientific community, the medical community have never personally seen HIV budding, because it's not what they research. The scientist who specifically research HIV/AIDS have seen this picture. So I'm not quite sure what you're getting at, but because these are peer reviewed articles, they become standard, standardized and accepted in the scientific and medical community. Just like people, you know, don't have personal experience, I mean, you don't see God, but you know, people argue that there is a God. And that's a bad analogy, because there is no evidence. I would say there's no hard scientific evidence here. Although, I have not personally seen it, it's not what I do.

Q And that's why I asked the question. If the point of an affidavit is to put your personal knowledge to paper and to testify under oath that it is what you personally know, do you personally know that that is HIV budding from an infected cell right there, or are you piggybacking off of somebody else's claim? That's what I'm asking

A If that were appropriate criteria for the practice of medicine, we would have no doctors.

Q I didn't ask if that would be appropriate criteria. I'm asking a very specific question. Try to key in on what I'm asking and answer and we'll go a lot faster.

A I can't answer your question.

Q Using your analogy then, are you taking this on faith that that's what that is?

A I'm not taking it on faith. It's peer reviewed. It's evidence based.

Q Who are these peers and who can I talk to that can tell me that that is HIV budding from an infected cell, if you can?

A You would have to find a microbiologist, a virologist who studies HIV/AIDS. And I'm sure there are many of them around. I'm just not

one of them.

Q But it managed to make its way into your affidavit?

A Uh-huh.

Q And you're testifying that you have personal knowledge of it.

A I'm saying, here's a picture of it. Yes. Rodney Richards had claimed that this doesn't exist. And I don't know that he has personal knowledge that it exists, or it doesn't exist. So I'm not sure why you're holding me to a different standard.

Q I'll say this. I've not talked to Rodney Richards. I've never met Rodney Richards in person.

A I'm sure you read his affidavit?

Q I have a copy of an affidavit in another case that he's done. I do not have a copy of his affidavit in this case. I don't know what Rodney Richards was asked to do. All I know is that I've got an affidavit from you and I'm pretty sure that I can fairly characterize what you're telling me. Is that you don't have personal knowledge of all the things in this affidavit. That you were piggybacking off of the claims of other scientists?

A Piggybacking is probably not the right word. Accepting the evidence that has been made in the scientific community, that has been peer reviewed by people who are specialists.

Q We'll leave it at that. Moving on to page 3 of your affidavit here. You make the claim; "HIV infection is caused by exposure to infected blood or body fluid." Is that a one hundred percent correlation, every exposure causes an HIV infection?

A Every exposure of any bacterial, or bacteria or virus wouldn't always cause a disease. It would depend on many factors.

Q What are those factors?

A It would depend on how infectious the person who was doing the exposing was. It would depend on how much exposure there was. It would depend on the genetic make-up and susceptibility of the exposed individual, in a few cases. It would depend on whether the virus was

- viable at the time of exposure. A spot of blood on a table wouldn't be considered a viable exposure. I'm sure there are other factors. But in every instance of HIV infection, there must have been an exposure.
- Q You then go on to talk about two genetic make-ups, RNA and DNA. What is the difference between RNA and DNA?
- A DNA is the genetic blueprint of life. And RNA is a, it is, there are different kinds of RNA. Messenger RNA and RNA that provides a, sort of a background for the construction of DNA. Again, I'm not a bench scientist. This is a very rudimentary understanding. But RNA by itself cannot replicate. It needs to integrate itself into the cellular DNA and borrow the replication of machinery, if you will, from the cell DNA, in order to get itself replicated. Which is what HIV does.
- Q So would HIV be characterized as RNA, or DNA?
- A It's an RNA virus.
- Q And if I understand what you just said correctly, an RNA virus must somehow convert itself to DNA in order to replicate?
- A Yes.
- Q What is the mechanism it uses to replicate?
- A It integrates itself into cellular, to cellular DNA, in the institute of HIV virus.
- Q Is there a particular enzyme, or protein that's used in that process?
- A Yes. There are many enzymes and proteins, but I'm not the bench scientist. There's reverse transcriptase.
- Q That's where I was going at. Do you know the difference between transcription and reverse transcription?
- A Yes, transcription is when something is directly transcribed from DNA. Reverse transcription is when you start with RNA and you integrate into DNA and then you use the DNA to remake the RNA.
- Q And do you know any of the names of any particular enzymes used in the reverse transcription process?
- A The reverse transcriptase.
- Q What is that?

A It's an enzyme that allows the RNA to be integrated, integrase, you know, I'm not gonna answer this question. I'm not a bench scientist.

Q Just answer as much as you know. I'm not asking for -

A There are specific enzymes that allow that to happen.

Q And are these enzymes brought along with the HIV?

A I'm not -

Q I need an answer to that question, because you make a claim later in your affidavit that this is crucial to you. So I need to kinda set the background to it. Reverse transcriptase, protease, you've heard these terms?

A Right.

Q Do all of us have the capacity to produce these enzymes, or do we? That's the first question? Or are these brought along into the body by HIV?

A I can't answer that question. I don't know.

Q You do in your affidavit.

A It was the literature.

Q So you referred to the literature on that?

A Yes.

Q You don't have personal knowledge of whether reverse transcriptase and protease are produced by the human body, or brought along into the human body by HIV?

A I could find that out for you.

Q No, I'm asking, sitting here today, having -

A I have not done that in a lab. No.

Q I'm not asking in a lab. What's your understanding?

A I do not have personal knowledge of that.

Q So if that's in your affidavit, you've gotten that from somewhere else? You don't have personal knowledge of that?

A I think I could probably cite where I got that one.

Q I'm assuming you didn't draw this page 4 diagram?

A No.

Q You got this from footnote 8, is that correct?

A That would be 13, I think.

Q Thirteen, I'm sorry. And you employed that into this document? It appears in that footnote 13, just like it does here?

A Yes.

Q You make a claim at the top of page 5, the top of the first full paragraph. "Likewise, the immune system is unable to eliminate HIV for several reasons." Is that your understanding of the way HIV works on the body? That HIV cannot be eliminated from the body?

A Right. HIV establishes reservoirs of infection and tissue.

Q You reference Luc Montagnier.

A Yes.

Q You reference that he won a Nobel Prize. And his Nobel Prize, I think that you would agree with me, that it has to do with HIV and the discovery of HIV in his research, correct?

A The Nobel Committee awarded him a Nobel Prize for the discovery of HIV. Yes.

Q You just stated that immune system is unable to eliminate HIV. Are you aware that Luc Montagnier disagrees with you on that point?

A I'm not aware of Luc Montagnier's opinion on that.

Q Assume for the sake of argument that he does disagree with you. That he stated openly, candidly and on the record numerous times that the body is exposed to HIV and a person with a healthy immune system can take care of it just like they would chickenpox, or the flu, or anything else? It can neutralize it, escort it out of the body and you will not retain an HIV infection for life. Assume that's true. Do you disagree with that statement?

A I do disagree with that statement. Chickenpox is not eliminated from the body.

Q OK. I'm sorry.

A You, yourself, if you've had chickenpox, you continue to have the chickenpox virus in your body.

- Q Chickenpox is a bad example. Let me re-ask my question. Assume for the sake of argument that Luc Montagnier has stated on the record time and time again that HIV can enter the human body and does, and people with healthy immune systems eliminate it and they have no HIV left in their body. Let me finish my question. Do you disagree with that statement?
- A I don't understand your question. You might have HIV entering a body, but not establishing infection and that would be different. Once the infection has been established, then HIV actually hides in the body tissue and in other blood cells. So there may be people who are exposed to HIV, who don't establish infection.
- Q What mechanism would the body use to rid itself of HIV in that scenario? Just hope it doesn't latch on?
- A AZT, or other antiretroviral therapy can interfere and infect diseases like hepatitis B. We interrupt the infectious process all the time by using medication.
- Q Short of using an AZT, or some similar ARV, can a human body get HIV into it and not become infected?
- A That is a question that I can't answer. So if HIV actually enters the body, there are expositors, where prior to using antiretroviral therapy, where we don't have one hundred percent of those exposed, actually developing disease. But it would be impossible to know at this point if that blood actually entered into the person. You know, could it have been that there wasn't an HIV infected cell on the tip of a needle, I can't tell you that.
- Q From personal experience, my sister treated an HIV, she's a nurse, treated an HIV infected patient. Got blood all over her head to toe basically, and later found out that they were HIV-positive. Not my sister, but the patient was HIV-positive and never converted. So in that example, I think would be consistent to what you're saying. Perhaps in that scenario no HIV ever made it into her body?
- A Exactly.

- Q Assuming that's not what we're talking about. Assuming we're talking about an actual RNA of HIV makes it into the body, gets into the bloodstream somehow, can the body rid itself of that?
- A Prior to establishment of infection?
- Q At any point?
- A No. I can't answer that question, because there are many different points. So once an infection has been established, the viral RNA would persist.
- Q We'll narrow it down how you've chosen. In an instance of infection, it's over, you can never rid yourself of it after the moment of introduction?
- A That is my understanding.
- Q And after the moment of exposure, you don't know?
- A Right. Exposure, how do you define exposure?
- Q HIV entering the body, but not maintaining -
- A OK.
- Q And if Luc Montagnier thinks otherwise, you disagree with him on that point?
- A I don't know what Luc Montagnier thinks.
- Q You make the claim in here that, same paragraph, page 5; "These genetic mutations are often more virulent and infectious, making them less susceptible to ARV therapy or normal immune response." What about these random genetic mistakes that you cite to make that true? Why would a genetic mistake be more virulent and infectious?
- A Because antiretroviral therapy targets certain epitopes on the virus and make those look different. And that specific antiretroviral therapy would no longer target that virus. It wouldn't be effective.
- Q And then you go on to say; "HIV functions like a parasite, targeting, infecting, using and eventually destroying the very immune system cells." But you don't have a citation for that. Do you have a citation for that statement?
- A That is my understanding of how HIV works. It evades detection so it can use the CD4 cell to replicate and it uses the CD4 cellular mechanism

to reproduce in to, to release bio particles. Then actually, there was one citation, and I don't know if I cited it here somewhere else. And probably not, because I didn't understand it fully. Then HIV targets those very cells that it uses to replicate itself. That the hallmark is the destruction of CD4 cells.

Q Do you have a copy of this report?

A I do somewhere.

Q With you, or somewhere in your office?

A Yes. I don't know if it's here, or if it's there. You mean the original paper that was published?

Q Correct.

A Yes. Would you like a copy of that?

Q Yes. If you could supplement that and we can mark it for future reference as Exhibit 4, Defendant's 4. And if time goes by and we forget to ask, we'll see the transcript and be reminded of it.

DOUG CUMMINS: What's the name of the report? I'll make sure that I followup with it.

A It's just the original paper that was published in 1983 or '84.

Q You mentioned earlier that you used this Insite Web site to do some of your research and it sort of gave you, pointed you in the direction of things. Is this the Website, do you recognize that, the way that looks?

A Yes.

Q Did you happen to look into the disclaimer on this Web site?

A No.

Q I'll just read a portion of it and I'll let you look at it. It says; "Due to rapid changes, as well as the possibility of human error, this site may contain technical inaccuracies, typographical or other errors. Users are advised to recheck the information contained herein with the original source before applying it to patient care. Members of the lay public are advised to consult with a physician regarding personal medical care."

A It's a medical disclaimer.

Q Well, it's also a human error and typographical inaccuracies and

technical inaccuracies disclaimer.

A I found a few typos in my affidavit also.

Q I did, too. "The information contained herein is provided "as is" and without warranty of any kind." That looks like the same page there?

A This looks like the Web site. Yes.

Q I'll mark that as 5. You said; "HIV functions like a parasite." Do most parasites kill the host?

A There are parasites that kill the host and there are parasites that live with the host. They're symbiotic from parasites.

Q Do you know of any other retro-viruses that kill the host?

A I'm not familiar with the retro-viruses, or the HTLV-1.

Q One, two and three. Three is HIV.

A One, two, yes. With whether or not they kill the host.

Q Are HTLV-1 and 2 the only other retro-viruses that you're aware of that cause infection?

A I don't know. I'd have to look up that one.

Q Do you know how many retro-viruses there are in the world?

A No. I'm sure there are many that haven't been discovered.

Q Do you know how many there are that have been discovered?

A No.

Q Do you know what a retro-virus typically does, if it doesn't cause infection?

A I'm really not sure what you mean by that. What does bacteria typically do?

Q No, it's not bacteria, it's a retro-virus. What does a retro-virus typically -

A I'm sure that all retro-viruses are not equal.

Q Let me finish my question. Do you know how retro-viruses typically perform in the human body?

A Again, I'm not sure what you're getting at. We're talking about one retro-virus and we understand that retro-virus. There are retro-viruses may, or may not be pathogenic. So I'm not sure that it's fair to lump

- them all into one group. Just like you have staph on your skin, but there's staph that can kill you.
- Q I've had that staph.
- A So medically the question you're asking me doesn't make sense.
- Q It does make sense. How do retro-viruses normally get passed from person to person? Do you know the answer to that? How do most retro-viruses pass from human to human?
- A I know how HIV gets passed.
- Q I'm not, the question is, we'll be here for ten hours if you don't let me finish my question and then answer the question.
- A I understand your question. But my concerns -
- Q Let me ask it again. My question is, how do retro-viruses normally get passed from person to person?
- A I don't know that there is a normal answer for retro-viruses. They may all function differently.
- Q You say; HIV hides from the immune system and integrates into the host's DNA. This is also on page number 5. That the host show shields the HIV. But you don't provide a citation for that claim. Do you have a citation for that claim, or do you have personal knowledge for that claim?
- A It's probably included in the citation that's below.
- Q If the host show shields HIV and provides sort of a home base for it to operate, how does HIV then destroy that cell that it's hiding in, or does it?
- A Not initially. It needs the cell.
- Q At a certain point it decides, for lack of a better term, a time comes, or a mechanism, something happens and it does eventually destroy the cell, is that your understanding?
- A I think that this is an area of science that's continuing to be understood. We know that CD4 is the hallmark of HIV/AIDS disease. And I think there may be several different ideas about how that works. And I'm not sure that there is a definitive answer, or that there's even just one mechanism for how that works.

- Q And I wasn't going with this yet. I was going to do it later, but I'll go ahead and switch since we're talking CD4. Is HIV cytotoxic?
- A Again, in some of the initial experiments that were done it was very difficult to grow HIV in lymphocytes, because the lymphocytes after several different passes would be destroyed. Once an immortal lymphocyte line was developed, it became possible to grow HIV, to culture it, if you will, outside the human body. And the only reason I'm saying that is that there are, and I don't understand this, and I think, from what I've read, that there may be different mechanisms for destruction. HIV, yes, may be cytotoxic to a certain extent. It may be that it's the rapid proliferation of CD4 cells and a finite number of divisions that a CD4 cell can make. So that the line actually burns itself out. It over replicates, if you will. But I think, I can't say anything more than that about it. I think there are several ideas about how this happens and there is probably more than one mechanism.
- Q You said a moment ago that the depletion of CD4 is the hallmark of AIDS. Is that your understanding?
- A Yes.
- Q How does HIV lower the CD4 count?
- A As I said, I think that it does it in several different mechanisms. There is ongoing research about, there's probably not just one mechanism that allows this to happen.
- Q Does anything else lower the CD4 count?
- A Specifically, only CD4, not others? That's the hallmark of HIV/AIDS. That it only, that the CD4 cells are primarily infected and depleted and not CD8 cells, or other immune system cells.
- Q Is there anything else that lowers CD4 counts?
- A Alone, not that I'm aware of.
- Q Is there anything else that lowers CD4 counts?
- A You need to be more specific in your question.
- Q Is there anything else in the universe that can act on the human body, causing a person's CD4 count to go down?

- A There can be general depletion of immune system function. Cancer, blood cancers can do that. But it wouldn't specifically target CD4 cells.
- Q Maybe they deplete CD8 also. Maybe they deplete, you know, everything else in the body. I'm asking though, is there anything else that can deplete CD4 cells? I'm not asking for its impact on any other aspect of the body, just on CD4 counts. Is there anything else that can lower CD4 counts? You mentioned blood cancers. Anything else that you can think of?
- A I can't answer that.
- Q You can't answer it because you don't know, or you can't answer it because you don't understand the question?
- A I can't answer it because I'm not aware of everything that might affect the immune system.
- Q So what in the world do you have personal knowledge of, or even observed knowledge of studied or scientific knowledge that can lower CD4 counts?
- A Nothing. Typically we don't look, we don't check for CD4 counts and CD8 counts specifically because, unless we have a patient who is HIV infected. Because there's no need to monitor what's happening with those immune system cells.
- Q Do you know what TH1 and TH2 are with respect to CD4 cells?
- A No.
- Q You said no?
- A No.
- Q So you wouldn't know whether TH1 or TH2 is the CD4 cell that's being depleted in HIV infection?
- A So are you talking about T helper cells?
- Q Correct.
- A No, I'm not aware of the distinction between TH1 and TH2 cells.
- Q And you don't know how those two systems work?
- A No.
- Q And you don't know which is depleted in people with AIDS?

A No. I have not seen that research.

Q Do you know whether Tony [REDACTED] ever had his TH1 and TH2 count tested?

A Not that I have seen. Not that I'm aware of.

Q Assuming with me for a moment that only one of the two classifications are impacted in people with AIDS?

A Can we not assume?

Q No, I mean I'm gonna assume on this one. Assuming that there's science that suggests, or not suggests, states unequivocally that either TH1, or TH2 is impacted in AIDS cases, but the other is not, would it be relevant to know whether Tony [REDACTED] TH1, or TH2 levels were going up or down?

A No.

Q Why would that not be relevant?

A Because it's not a diagnostic criteria.

Q It wouldn't even be relevant?

A There wouldn't be any reason to check it.

Q I'm not saying it's necessary, I'm saying it's relevant. It's another piece of information that can tell you what's going on in his body?

A What would it do for me medically?

Q It would tell you whether his TH1 is rising or falling and whether his TH2 is rising or falling?

A Why do I need to know that?

Q Because if one of them falls, only in people with AIDS and one of them does not, is not impacted with people with AIDS?

A So you're using it diagnostically?

Q I'm not asking that. I'm just asking if it's relevant? If the sun is shining outside that's relevant to whether it's -

A I don't need that piece of information to make a medical diagnosis. So it's not relevant.

Q I'm not asking that. I'm not asking for a diagnostic purpose. I'm asking if it's relevant?

- A I don't need it to make a treatment decision. It's not relevant to me medically.
- Q Let's say that in people with AIDS, their CD4 counts are dropping and let's just say because there are other things that cause CD4 counts to drop. You've named blood cancers, I'll give you another list in a minute. Let's say that there are other things that cause CD4 counts to drop. But in those other things, all CD4 counts drop. TH1 and TH2. But in AIDS only TH1 drops. Let's just assume that's true. Would it still be relevant, would it still be relevant in your mind whether his TH1 was dropping, or staying the same?
- A The diagnosis of AIDS is not made solely on a CD4 count level.
- Q The diagnosis of AIDS, or HIV-positive?
- A Well, the diagnosis of HIV-positive doesn't have anything to do with CD4 counts.
- Q Correct. I'm talking about AIDS.
- A Right. And I just said that the diagnosis of AIDS is not based solely on the CD4 count.
- Q You said a moment ago that lowering the CD4 count would be the hallmark of AIDS.
- A When we say hallmark medically, it's the un-defect. It's what causes the demise of, it's what leads to the infections that cause the demise of HIV.
- Q Could someone die with AIDS with a CD4 count of 1,500?
- A Of course they could. But not of AIDS. Somebody with AIDS, OK, strike that. Somebody with AIDS -
- Q You don't get to strike.
- A Yes. Somebody with AIDS could die with a CD4 count, they could die of another cause.
- Q But again, going back to the TH1, TH2 distinction. Assuming there are other things in the world that can cause CD 4 counts to drop besides HIV. And assuming when CD4 counts usually drops, TH1 and TH2 both drop. Would it be relevant to you whether to know that Tony [REDACTED] had a TH1

level that either was, or wasn't dropping?

A No.

Q Why not?

A Because I've already established a diagnoses of HIV. I don't need to, and it doesn't affect treatment options. If there's a treatment targeted specifically to TH1 or TH2, I mean, I can't even imagine what that would be because you target the treatments to the retro-virus. Maybe you would have a treatment that supported survivability and functionality of TH1, or TH2, whichever one drops. If that were the case it would become relevant. But I don't need it to establish a diagnosis. And I don't need it to establish a treatment regiment. So at this point it is not something that I would need to manage medically Tony [REDACTED]

Q Let's assume that TH1 always drops. Let's assume that TH1 always drops in the presence of genuine HIV infection. And let's later assume that you were to be able to test Tony's TH1 levels and they were to remain stable. Something inconsistent with a typical HIV infection. Would that then be relevant?

A I would have to review the literature on that.

Q Have you seen any records, medical records on Tony [REDACTED] talking about TH1 and TH2 levels?

A I was not looking for TH1 and TH2. There may be, I can go back and look. It may be that someone has checked the TH1 and TH2, but because it's not relevant to establish a diagnosis, or to recommend a treatment regiment, I was not looking for that.

Q I'm having trouble with you with answering.

A I'm sorry.

Q Because if TH1 always one hundred percent drops in someone with HIV -

A I've not seen that. Could you show me where, the piece of literature you have that suggests that?

Q I could, but I'm in the unique position of asking questions. Assuming that's the case?

- A I mean we can talk in hypothetical circumstances.
- Q Assuming that's the case, TH1 always drops, if you saw a test that said, Tony [REDACTED] TH1 is not dropping, wouldn't that be concerning to you?
- A Let's do this. Let's talk about strep throat. And what I can tell you is that I had a patient who has a screen for strep throat and this is bacteria, easy to culture and I send for a confirmatory culture and the culture is positive, then I have a problem with that negative rapid test that was done in the office. And we've established for strep that culture is the gold standard for that particular diagnosis. And that the rapid in-office test may have false/negatives. So then I would note that that was a false/negative test. That is established in the literature. So I would need to understand how clinically your Helper-T cell 1 and Helper-T cell 2 counts were, how they are, how it is recommended. What the evidence is. And what the national experts, the scientists who do the research and who make the treatment and diagnostic treatment recommendations, how they would suggest that should be used.
- Q Have you ever read the Journal of Medical Virology?
- A I believe I have read an article or two, but I don't routinely subscribe, or read the Journal of Medical Virology.
- Q In 2006 there was an article by George Funk. Tell me if you agree with this. The HIV replication lists its little cytopathic effect in productively infected cells. And that CD4 T lymphocytes are eroded by other mechanisms? Further stated, no evidence was found for marked, direct, or indirect cytopathic effects in HIV infected cells. Suggested that HIV erodes CD4 lymphocytes by other mechanisms. Do you have any reason to disagree with that sentence?
- A I wouldn't be the expert.
- Q In your affidavit you testified that CD4, HIV kills CD4 cells.
- A That HIV infection causes destruction of CD4.
- Q HIV functions like a parasite, targeting, infecting, using and eventually destroying the very immune system cells that the immune response relies on to eliminate or control infection.

A Right.

Q Those are your words.

A Right. HIV infection.

Q Let's move on to the next one then and we'll come back to CD4 in a minute. What is viral load?

A It's the number of viral copies present, DNA, PCR testing.

Q Do you know what PCR stands for?

A Polymerase chain reaction.

Q And what are they doing in a PCR test?

A They are copying, they are unraveling DNA and copying the DNA. Then making additional copies of it.

Q So they're looking for DNA, or RNA on a PCR test?

A Actually they do both branch, DNA and RNA testing.

Q Do you know which one Tony [REDACTED] had?

A I think he's had both.

Q Are these full, complete copies of the virus that is being detected and counted?

A You know, it would probably depend on the test that the lab was using.

Q Are you aware of any PCR test that claimed to be counting full, complete copies of HIV?

A I'm not aware of the specifics of the PCR testing that's done. I'm not a microbiologist.

Q Do you who invented the PCR test?

A I don't.

Q So you've not read what he has to say about PCR testing used in HIV?

A I read what Rodney Richards says about it.

Q Rodney Richards didn't invent the PCR test. He has multiple patents on PCR tests. I believe he does. But I'm asking, have you ever read what the person who invented the PCR test procedure has said with respect to using it in the field of HIV medicine?

A No, I haven't read that.

Q We'll talk specifically with respect to Tony [REDACTED] PCR. You state on

- page 8; "There is an arsenal of laboratory methods is available to screen blood and diagnose infection." We're on page 8.
- A For whatever reason, my copy is not numbered. I must have added the numbers after I printed off my copy.
- Q I'm glad you did.
- A An arsenal of laboratory methods is available to screen blood and diagnose infection.
- Q What is included in that arsenal of laboratory methods?
- A For screening there is the ELISA test.
- Q What does that stand for?
- A That's enzyme linked immunosorbent assay.
- Q Is that sometimes referred to an EIA?
- A Yes.
- Q Because I think I've referred to it both ways. I don't want the record to be muddy. What else is in the arsenal?
- A There are DFA tests, and antibody tests, and Western blot tests are antibody tests.
- Q What was the first type of antibody tests?
- A The DFA.
- Q What does that stand for?
- A Direct fluorescent antibody.
- Q And Western blot?
- A Western blot.
- Q Are you saying Western blot and the DFA are different types of tests?
- A Again, I'm not a microbiologist, or a lab scientist.
- Q And is that the totality of the arsenal that you're aware of?
- A In the literature there has been some discussion about using RNA testing, PCR, RNA testing to diagnose acute HIV infection during the period prior to the production of antibodies. So that might be considered a diagnostic test at a certain phase of infection. It wouldn't routinely be done as a screening test however, and culture.
- Q You said culture. What are you saying about culture?

- A Culture is sometimes used for confirmation.
- Q Does the Indiana State Department of Health ever use cultures to diagnose?
- A The Indiana State Department of Health follows the CDC guidelines. Actually, you know, let me just clarify that. The Indiana State Department of Health doesn't actually do screening for confirmation. We work with providers who do that. But it's not us. We're not doing it. We don't a clinic.
- Q The people in Indiana are using culture as a means of diagnosing?
- A Oh, I don't know what people in Indiana are doing.
- Q People in the United States are using culture as a means of diagnosing?
- A As I said, culture is available and could be done. I doubt, it's not a CDC recommended confirmatory test. But it is available.
- Q Have you ever cultured HIV?
- A I'm not a microbiologist. No.
- Q So you're testifying that you can diagnose with either one, or some combination of the following, EIA -
- A You can't diagnose. No, I didn't say that. I said EIA is used as a screening test. It's not diagnostic.
- Q Which are the diagnostic ones?
- A There's not one test. An RNA test is considered diagnostic. But you wouldn't use that as a screening test in the general population. So if you're using these tests you would need an EIA test confirmed by a Western blot test.
- Q And is that the best way to diagnose HIV infection?
- A That -
- Q Let's start big and we'll go small. Is that a way to diagnose HIV infection?
- A That is a way to diagnose HIV infection.
- Q So an EIA, in combination with the Western blot is one way to diagnose. Are there any other ways to diagnose HIV infection?
- A As I said, you could use an RNA test.

- Q What is an RNA test?
- A That's the PCR test. Where you're actually getting, looking for copies of HIV, RNA.
- Q And you can use an RNA test, or a PCR test to diagnose HIV?
- A It can be done. Yes. In the period when you wouldn't have antibodies. Or if you have, if you do have PCR HIV virus, I believe is, if the CDC says that you can use that for diagnostic tests.
- Q Are you aware of any PCR test that says that the test can be used as a diagnostic test?
- A I don't know what the tests say.
- Q Have you ever diagnosed anyone, you've never diagnosed anyone HIV-positive?
- A Probably not. Because I would do a EIA test. So I'm not the one who does the diagnosis.
- Q Do you maintain a private practice now, or have you closed your private practice?
- A No, I work for the health department. So I don't have a private practice.
- Q So we've talked about EIA combined with Western blot is a way to diagnose. A PCR test is a to diagnose, according to you.
- A And CDC.
- Q Culture you said is a way to diagnose?
- A A culture, HIV can, yes, it's not a standard that's used. But if you had a positive HIV culture that would be diagnostic.
- Q Does the CDC recommend that as a way to diagnose?
- A Those are available options.
- Q And this is something that's been done for diagnostic purposes, is that correct?
- A That, I don't know.
- Q What is the EIA test looking for? We'll take it one by one.
- A It's looking for antibodies.
- Q Any particular antibodies?

- A That, I don't know.
- Q Do you know how many antibodies it's looking for?
- A With the EIA test, I don't know.
- Q What is the Western blot looking for?
- A It's also looking for antibodies.
- Q Any particular antibodies?
- A It's looking for, there's a list of antibodies, p24 would be one. There needs to be two of three to have a diagnosis, but absence of antibodies says, absence of bands representing those antibodies, so that there is no diagnosis. Without p24, then I think you have somewhere in the middle, you don't have a firm diagnosis, you have an inconclusive test and it needs to be repeated.
- Q And just so we're not losing, getting lost in scientific terms, just in general, what is an antibody?
- A An antibody is a solvate produced in response to a challenge to the immune system.
- Q Produced by whom, at host?
- A Yes.
- Q So when you say p24 -
- A Specific to an epitope on HIV/RNA.
- Q But you're saying p24 is an antibody produced by the host in response to infection?
- A No. p24 is the epitope on the HIV/RNA. The antibody that is produced is the fit to that p24. It's the locking key, if you will.
- Q So we can use something from a simple flu virus. You get the flu and your body produces an antibody. That antibody helps escort the flu out of the body, break it down and you then recover after a few days, is that third-grade biology understanding of the way antibodies work?
- A That's how antibodies work for flu.
- Q Correct. That's what I'm saying. That's why your body is producing antibodies in response to a specific foreign -
- A In response to a challenge to your immune system. Yes.

- Q Anyone listening to this and says what's an antibody, I want them to kind of get a basic understanding. Why are we looking for these specific antibodies, these ten specific antibodies?
- A Those have been defined as epitopes that are on the HIV virus, that are necessary to attach to cells, to C4 cells. Integrate in to DNA. Then rejoin the protein and be released. So those are epitopes that are specific to HIV virus.
- Q Does your body produce antibodies to any of these p15, p17, p24, pp120, gp160, all of them, does the human body as a host have the capacity to produce antibodies to those proteins in response to any other foreign passage, or are they specific to HIV?
- A Those are specific to HIV.
- Q There's no other reason the body would ever produce any one of those ten antibodies?
- A Not those antibodies. There may be cross-reactivity. Rarely, very rarely, that occurs in someone with an autoimmune disease. But that's very rare. And that's why you don't rely on one specific, one individual test to make the diagnosis of HIV.
- Q So if I understand you correctly, you're saying that there are other things that can cause you to have a reactive result to one or more of these proteins that are listed here on page 9 of your affidavit. And we've been talking about proteins specific to HIV. If I understand you correctly, you're saying there are other things that can cause the body to produce reactivity with one or more of these proteins that the Western blot looks for?
- A There are rarely certain autoimmune diseases may cause a person to cross react with a band. It may cause an indeterminate test result.
- Q Do you know whether the body can produce anti-carbohydrate antibodies?
- A Anti-carbohydrate antibodies, do you mean like gluten antibodies?
- Q No, I think these are antibodies that the body produces in response to lack of protein. Not everybody, but I think some people do. Are you

aware that that happens?

A I don't know anything specific about it. No.

Q Are you aware of any tests, not tests, studies that show that the body's production of anti-carbohydrate antibodies can cause certain proteins on a Western blot to be reactive?

A I'm not.

Q What about just naturally occurring antibodies, that some people just have naturally occurring antibodies for whatever reason and that those naturally occurring antibodies might cause cross-reactivity on a Western blot test?

A I don't think antibodies occur naturally. They occur in response to challenges.

Q If there was a study by Barbacid and two other names that I can't pronounce, that concludes that humans have antibodies capable of recognizing viral, lack of proteins and that their study demonstrated that these antibodies are formed in response to cellular modification of lack of proteins rather than as a consequence to the exposure of virus, would you have any reason to disagree with the result of that study?

A I don't know. I haven't seen it.

Q If there was a study by Healey and Bolton in 1993 that showed lack of protein reactivity on Western blot on unaffected blood donors, would you have any reason to doubt the results of that study?

A It's hard to say. I would have no reason to doubt it without actually seeing the study and reading the study and reading what other people had said in response to that study.

Q What about passive immunization, the receipt of gamma globulin, or immune globulin, are you aware that that process can cause cross-reactivity on a Western blot test?

A Passive immunization, you're receiving actually globulin from, it's from another individual. If that individual had a reason that, if that individual happened to have a cross reactive protein, then, yes, then you could have an indeterminate test on a Western blot. That happens after

childbirth with passive receipt of maternal antibody. In babies whose parents are infected, the mom is infected with Hepatitis B and HIV.

Q Are you aware of any studies that show leprosy can cause cross-reactivity in the HIV-1 Western blot test? And all of these apply to EIA tests as well.

A No.

Q How about tuberculous, are you aware of any studies that show that tuberculous can cause cross-reactivity on a Western blot test?

A No.

Q Will you be OK with me just reading a long list of conditions, or do you want me to go step by step? Mycobacterium avium?

A That's the same, it's a mycobacteria that causes tuberculous.

Q Are you aware of whether or not that can have an impact on an HIV-1 Western blot test?

A What I am aware of is that many individuals infected with HIV/AIDS actually suffer from tuberculous and mycobacterium avium infections actually. You may have a lot of studies and I'm not saying that I agree with your studies, or have read your studies, or actually had the training to comment on your studies. So you can read all the lists of things you'd like, but I'm not saying that I agree with them.

Q What about systemic lupus erythematosus, are you aware that that can cause cross-reactivity with an HIV-1 Western blot test, or EIA test?

A That is an autoimmune disease. There are in very rare circumstances individuals with autoimmune diseases who have a degree of cross-reactivity. But they would not have a strongly positive response on Western blot.

Q What about kidney failure, or renal failure, are you aware of whether that can cause cross-reactivity on an HIV-1 Western blot test?

A No.

Q If there were multiple studies showing that it can, would you have any reason to doubt those studies?

A Maybe. I might. I'd have to see them.

Q What about hemodialysis? I know that has something to do with renal failure. Are you aware of whether hemodialysis can cause cross-reactivity on a Western blot test?

A I am not aware of that.

Q Let me give you a long list here and then I'll clear it up at the end. And you can tell me any of those that you are aware of. Alpha interferon therapy in hemodialysis patients, flu, flu vaccination, herpes simplex 1, herpes simplex 2, upper respiratory tract infection, recent viral infection or exposure to viral vaccines, pregnancy, malaria, high levels of circulating immune complexes, hypergammaglobulinemia, false positives on other tests, including RPR (rapid plasma reagent) test for syphilis, rheumatoid arthritis, hepatitis B vaccination, tetanus vaccination, organ transplantation, renal transplantation, renal transplantation, anti-lymphocyte antibodies, anti-collagen antibodies, serum-positive for rheumatoid factor, antinuclear antibody, autoimmune diseases, scleroderma, connective tissue disease, dermatomyositis, acute viral infections, DNA viral infections, malignant neoplasms, alcoholic hepatitis/alcoholic liver disease, primary sclerosing cholangitis, hepatitis, "sticky" blood, antibodies with a high affinity for polystyrene, but is used in the test kits, blood transfusions, multiple blood transfusions, multiple myeloma, HLA antibodies (Class I and II leukocyte antigens), anti-smooth muscle antibody, anti-parietal cell antibody, anti-hepatitis A IgM (antibody), anti-Hbc IgM (antibody), administration of human immunoglobulin preparations pooled before 1985, hemophilia, haematologic malignant disorders/lymphoma, primary biliary cirrhosis, Stevens-Johnson syndrome, Q-fever associated with hepatitis, heat-treated specimens, lipemic serum, haemolyzed serum (blood where haemoglobin is separated from the red cells), hyperbilirubinemia, globulins produced during polyclonal gammopathies, healthy individuals as a result of poorly-understood cross-reactions, normal human ribonucleoproteins, other retroviruses,

- anti-mitochondrial antibodies, anti-nuclear antibodies, anti-microsomal antibodies, T-cell leukocyte antigen antibodies, proteins on the filter paper, Epstein-Barr virus, visceral leishmaniasis, and receptive anal sex? Are you aware of any of those conditions causing cross-reactivity on an HIV-1 Western blot test?
- A I am aware that rarely individuals with autoimmune diseases and I'll let you select which ones those are out of that list. You're the expert on that piece of evidence. So I'll allow you to select the autoimmune diseases out of that list. Rarely may show cross-reactivity, resulting in an indeterminate band profile.
- Q You mentioned tuberculosis a minute ago. You said a lot of times people with HIV developed tuberculosis.
- A They become co-infected.
- Q That's on the list of opportunist infections, correct?
- A Tuberculosis, I can't remember if it's on the list of opportunist infections. Opportunist infections -
- Q Let me redefine it. It's on the list of AIDS defining illnesses, correct?
- A Yes.
- Q There's a 1994 study, talking about tuberculosis, HIV cross-reactivity, and these antibodies. How would you know whether the tuberculosis patient is not causing cross-reactivity with the HIV test in general?
- A Because tuberculosis has its own Western blot profile.
- Q Right. But I'm suggesting here that there is a study discussing cross-reactivity and tuberculosis on an HIV-1 test. Would you have any reason to doubt that test?
- A Sure, depending on when it was done and was the patient co-infected with HIV. Was the patient in early phases of HIV infection and perhaps it hadn't been previously diagnosed. That means, I can't tell you that I agree with something that I haven't read. When was that study published? In 1982?
- Q In 1994. Infection with human immunodeficiency virus type 1 in human T-cell lymphotropic viruses among leprosy patients and contacts.

- A Leprosy, I thought we were talking about tuberculosis?
- Q We are. But would you have any scientific, or personal knowledge reason to dispute that the cross-reactivity could exist?
- A I'm not familiar with that literature.
- Q Do any of the other ones jump out at you? You discussed the autoimmune diseases. So assuming you're talking about all of the autoimmune diseases you know of that can cause -
- A According to your list, I guess we should all have positive Western blots and the EIA shouldn't we?
- Q Again, I don't answer questions. Alcoholic hepatitis, alcoholic liver disease. I mean that's obviously not autoimmune. Do you know whether Tony [REDACTED] was a drinker?
- A I think he admitted to indulging in excessive alcoholic beverage consumption at one point in the record, I saw.
- Q Let me ask you this. Other than the autoimmune diseases, did anything else that I read in that list popup as something you would have a problem with and say, yes, or no, it doesn't cause cross-reactivity, or yes, it causes cross-reactivity?
- A Because of contamination. If there is a lab that's not using sound laboratory procedures, the sample contamination could occur. The use of some protein on filtered paper.
- Q Let's talk about something like acute viral infection. In 1995 there was a test, I mean a study produced, Cordes Ryan, it's titled, "Pitfalls in HIV Testing." Where he identified acute viral infections that's being cross-reacted with Western blot tests. There's five other tests. I can go through them individually. Five other studies, I can go through them individually. Do you have any reason to think that a acute viral infection is not cross-reactive with Western blot?
- A Again, I don't know the literature. I would say that, based on my understanding of HIV testing, there are theoretical possibilities for cross-reactivity. Based on contamination, based on the rare patient with autoimmune disease. Who may be cross-reacted. Has a transfer

of the anal globulin. It is why we use multiple criteria for diagnosing HIV.

Q What are those criteria that you use?

A Again, we use the EIA testing. We use, in fact, multiple EIA tests, Western blot tests, and a confirmatory, Tony [REDACTED] actually was confirmed with PCR, RNA tests. So you may be able to make an argument for an indeterminate test result, and some showed cross-reactivity. If that person were erroneously mis-diagnosed and the testing were not repeated, then you may, that may be where you're coming from, your argument. However, with multiple tests performed, in the Tony [REDACTED] case multiple labs overtime, which have all shown the same results. I think we're beyond an element of doubt.

Q But if you're assenting, and it sounds like you are, to the fact that sometimes there are some conditions, be they acute viral, syphilis, alcohol, sclerosis, whatever, if there are -

A I have -

Q Let me finish my question. If you're assenting to the fact that there may be some cross-reactivity possible somewhere, wouldn't that cross-reactivity be consistent lab, to lab, to lab? I mean if the body is producing an antibody in response to sclerosis?

A If what you are saying, because I'm not assenting to anything. If what you are saying has that, an acute viral illness can cause cross-reactivity, and your argument that once you develop an antibody, you march that little virus right out of your body. But once the virus is gone, you wouldn't have cross-reactivity any longer. So, no, it wouldn't be persistent, according to your argument. And I haven't assented to anything.

Q I've not made any argument. I'm not an expert. My medical training stops at about ninth-grade biology. That's not exactly true, but it might as well you can say for this. I'm not under oath. I'm not testifying. My question to you is, you seem to have opened the door a little bit to the fact that there may be some things in the world that can cause

cross-reactivity, is that fair?

A What I'm aware of is there are in rare cases people with autoimmune syndrome who would have cross-reactivity, which would lead to an indeterminate profile on Western blot.

Q Do you have any reason to doubt that there are studies that exist that show the long list of things I just discussed -

A I -

Q Please let me finish.

A Go on.

Q Do you have any reason to doubt that there are studies that demonstrate that that long list of things I just read a moment ago, starting with anti-carbohydrate antibodies, ending with receptive anal sex, can cause cross-reactivity on a Western blot? Do you have any reason to doubt that those studies exist and do what they say they do?

A That's multiple questions.

Q Take them one at a time.

A I have no reason to doubt that they exist, because you have them there. Just as I have no reason to doubt that Andrew Wakefield did a study showing that an MMR vaccine causes autism. Now that study was discredited, disproven. It was unethical. So, yes, I have reason to doubt the credibility of studies until I have seen what the scientific community says about them. Those people who are experts. What does the study mean? How was it done? I can't comment on that.

Q I'll say this. I have no idea what you're talking about. I know nothing about autism. I'm talking about these. You said that you have no reason to doubt they exist. Are you suggesting you doubt that they're accurate?

A I'm suggesting that I don't, I haven't seen them. I don't know anything about them.

Q Are you interested in seeing them?

A I would be happy to take a look at them. I'm not, again, a microbiologist. So I would not be the right person to confirm, or refute

those studies.

Q You're here presumably, at least part of your affidavit suggests that you believe the Western blot test is accurate, was not cross-reactive with anything else?

A I believe that it is used as a diagnostic tool.

Q Could it have been cross-reactive with something in Tony [REDACTED]

A Western blot testing, when positive, after a positive EIA test in a population at risk for HIV -

Q I'm not asking for that. Could it have been cross-reactive with something else in the Tony [REDACTED] case?

A And the odds of that happening -

Q I'm not asking for the odds. I'm asking if it's possible? If it's possible? And what did you do to rule out that it wasn't cross-reactive?

A It's not possible.

Q It's not possible that Tony [REDACTED] had any cross-reactivity in his Western blot test?

A No.

Q What did you do to rule it out?

A I didn't do his diagnostic testing.

Q On page 13; "Tony [REDACTED] has an incontrovertible diagnosis of HIV infection and meets criteria for the diagnosis of AIDS."

A You asked me what I did to rule it out.

Q Are you here to testify that Tony [REDACTED] has HIV?

A Based on, Tony [REDACTED] has had three positive Western blot tests.

Q Are you here to testify that Tony [REDACTED] has HIV? It's a specific question. It doesn't need background. Is that one of the reasons you're here?

A Yes, I'm here to testify that Tony [REDACTED] has HIV.

Q What did you do to rule out all these things being cross-reactive? What, if anything?

A I didn't need to rule them out.

Q I didn't ask that. I'm telling you, I have a plane ticket back at 8 o'clock

in the morning. I'll stay here to 6, and then I have to go to the airport. Dan has a family to go to. It's gonna take a long time if you don't answer my questions. It will take a very long time. I'm asking you a specific question. What did you do while you were determining that he had an incontrovertible diagnosis of HIV to rule out -

A I reviewed his test results, and I reviewed his medical records.

Q Let me finish the question. What did you do to rule out all these issues? What did you do to rule out flu? What did you do to rule out a flu vaccination? What did you do to rule out herpes simplex 1? What did you do to rule out herpes simplex 2? What did you do to rule out alcoholic hepatitis and alcoholic liver disease? What did you do to rule out hepatitis? What did you do to rule out each one of these things, if anything?

A I didn't need to rule them out.

Q I didn't ask that. I asked what you did? Did you rule these out? Yes or no, did you rule these out?

A I did not rule them out, because I did not, I was not his medical provider and there was no need to rule them out.

Q See how much faster that is.

JOAN DUWVE:Can we take a break?

G. BARON COLEMAN:Yeah, let's take a break.

REPORTER'S NOTE:

Short break taken.

DIRECT EXAMINATION CONTINUES

QUESTIONS BY G. BARON COLEMAN

Q Let me just, because there was a lot of confusion on the record a moment ago. Let me just clarify two things here. One, is there any instance you're aware of that can cause cross-reactivity with an HIV, either a EIA test or Western blot?

A In rare instances, people with autoimmune diseases may demonstrate some cross-reactivity. That would result in an indeterminate Western blot test. So they would not have a strongly positive Western blot test.

- Q Let me ask it again. Is there any instance you're aware of, any would include autoimmune, is there any instance you're aware of that can cause cross-reactivity on a Western blot test? I'm not asking for rare.
- A Reactivity on a Western blot test, there are different bands on a Western blot test.
- Q Correct.
- A So to have a positive Western blot test you need to meet criteria. So persons with autoimmune diseases may show cross-reactivity with a band on Western blot testing. Which would not confirm positivity on the Western blot test, that would be an indeterminate test result on Western blot testing.
- Q So is there any instance that you're aware of where a person can have a condition, a syndrome, anything at all that can cause cross-reactivity on a Western blot test?
- A At certain, individual band lengths. Not, it would not, the cross-reactivity would not cause positivity at bands.
- Q I didn't ask anything about positivity. Let's try it one more time. Is there any instance that you're aware of where somebody is gonna have a condition, a syndrome, a pathogen, a disease, anything that can cause cross-reactivity with a Western blot test?
- A Autoimmune diseases.
- Q So is the answer, yes? It would be a lot easier, because it's a yes or no. And then an explanation.
- A I already did the explanation.
- Q Yes or no?
- A Yes.
- Q What did you do to rule out cross-reactivity with Tony [REDACTED]
- A I did not perform testing on Tony [REDACTED]
- Q What did you do to rule out cross-reactivity with Tony [REDACTED] when you made the statement, "Tony [REDACTED] has an incontrovertible diagnosis of HIV infection and meets criteria for the diagnosis of AIDS?" What did you do to rule out cross-reactivity?

A I reviewed Tony [REDACTED] lab results and he met criteria for AIDS, or HIV and an AIDS diagnosis.

Q So did you do anything to rule out cross-reactivity?

A I did not see Tony [REDACTED] I personally could not rule, when you say, "rule out," in the medical sense what that means is that I have seen him. And since I personally have not seen Tony [REDACTED]

Q Did you see any of his medical records?

A I saw Tony [REDACTED] medical records.

Q Did you see any medical records that aren't included in the affidavit?

A Yes.

Q Where are they?

A I have a whole stack of them that I received after.

Q Do you have them with you?

A Yes.

Q Can I see them? Did you notice in those records where any clinicians did anything to rule out cross-reactivity?

DOUG CUMMINS: That's my copy. Dan has a copy and Rodney Richards got a copy, I think of the whole thing, right?

DAN VANDIVIER: You've given me everything in your file. Clark should have a copy of that, and I assume it got passed around.

A So the answer is, no, there was no need to even think about cross-reactivity.

Q I didn't -

A You told me that I could give an explanation.

Q OK. You're right.

DOUG CUMMINS: I need those. Those are my copies.

Q OK. I'll look at them in a minute. When we go to lunch, I want to peek at them.

DOUG CUMMINS: That's fine.

Q Did you notice anything in the records where any clinician ruled out cross-reactivity?

A No.

- Q When you say, "No," are you saying, no, that you didn't notice anything that was done to rule out cross-reactivity?
- A I'm saying that I don't know how to answer the question.
- Q Did you look at his medical records?
- A I did look at his medical records.
- Q Did you see anything, did you see any note from any clinician, doctor, nurse, clinical practitioner, nurse practitioner, anything at all where anybody ruled out cross-reactivity?
- A Let me answer this question. Yes, Tony [REDACTED] does not have an autoimmune disease.
- Q How do you know that?
- A Because lab testing was done and there was no evidence of autoimmune disease.
- Q Where was it done? Where in the records? Do you know what hospital it was at?
- A He had lots of lab tests done. He's not been diagnosed with an autoimmune disease. He doesn't have complaints of autoimmune disease.
- Q I'm not asking if he's been diagnosed, I'm asking if it's been ruled out? Do you know where in the medical records it was ruled out?
- A No, I don't. There was no evidence of autoimmune disease.
- Q I'm not asking if there was evidence. I'm asking if it was ruled out?
- A Then let me rephrase my response. I would say, yes, Tony [REDACTED] has never had a diagnosis, or evidence of autoimmune disease.
- Q Do you know whether it's been rule out? Do you know what ruled out means in a medical sense?
- A I do. I know every well what ruled out means. You wouldn't rule something out if he didn't have symptoms, or any lab results that would point you in that direction. So it becomes irrelevant.
- Q So is there any note in the record of, if I dig through those records -
- A If you came to my office, I wouldn't rule you out for something if you had no complaints.

- Q So you're saying there's nothing in the records that indicate any cross-reactivity was ruled out? Any autoimmune disease ruled out?
- A Now you're gonna go to that whole list that you had and I've not, I haven't said that I believe, or have any knowledge of all of those a hundred measles vaccines and flu vaccines and hepatitis vaccines, causing cross-reactivity. And I'm not gonna go there.
- Q Let's go with the ones you know. Is there anything in the records that rules out any cross-reactivity that you're aware that can cause cross-reactivity?
- A Lack of symptoms.
- Q So there's a note in the medical records somewhere that says, Tony [REDACTED] does not have symptoms of autoimmune disease?
- A No.
- Q What would the notes say?
- A No, it would be chief complaint, patient is complaining of problems with his memory, or renal failure.
- Q Page 9 of your affidavit. You have here; Examples of reactions by an HIV-1 Western blot." Now these "p" numbered and gp numbered proteins your understanding of the antibodies that are being looked for on EIA, or a Western blot test?
- A On a Western blot test.
- Q On a Western blot test?
- A Yes.
- Q Do you have any reason to doubt that these same proteins are looked for on an EIA test?
- A I don't know what an EIA test is looking for.
- Q If I told you to assume that they are looking for the same proteins, would you have any reason to doubt that?
- A I really am not sure.
- Q Do you have any reason to doubt that?
- A Are you an expert in EIA testing?
- Q I don't have to answer your questions. Maybe because you've only

- testified once as an expert before, maybe you don't understand the role of an expert. But I'm allowed to ask you questions. And if you don't understand it, or you don't know, that's a perfectly acceptable answer. And it will speed this along. Assuming for the sake of argument, assuming hypothetically that the EIA looks for these same ten proteins, do you have any reason to doubt that?
- A I have reason to doubt it, because I haven't seen it and I don't know. Yes.
- Q Let's stick with Western blot. Are these the ten proteins to which antibodies are produced, that are looked for on a Western blot test?
- A I am not an expert in Western blot testing. These are, this is an example of, these are examples of Western blot, reactions, these are proteins that are looked for to confirm a diagnosis of HIV. And there are specific criteria used to confirm an HIV diagnosis. That's Western blot testing.
- Q Do you know of any cross-reactivity with the p15 antigens?
- A No.
- Q Do you know of any cross-reactivity with a p17 antigen?
- A No. I don't know of any specific cross-reactivity with any of these antigens.
- Q I'll submit to you that some tests look for the p31 and some look for the p32. Do you have any reason to doubt if we assumed that the p32 is also a valid test, that there would be any cross-reactivity with the p32 antigen?
- A I am not aware of, I don't know about Western blot. I don't know about cross-reactivity on the Western blot testing.
- Q Page 9, you say that in a low-risk population there's a certain false positive prevalent in a high-risk population and there's a lower false positive prevalent. Why the difference between false positives in a low-risk and high risk population?
- A I believe that we're talking about screening tests. And screening tests are used to, in a population to detect every case of disease. So they are

sensitive, but not necessarily specific. For example, if we're using a screen test to make sure that the blood supply is safe, we would, using that screen test we would want to make sure that we didn't leave any infected individual out. And we may include uninfected individuals, uninfected individuals may be diagnosed and we know that's true with ELISA, or EIA testing. To make sure that we don't include, inadvertently include infected individuals in, as donors for the blood supply.

Q So you're saying the difference between low-risk and high-risk false positive rates is that low-risk patients get different tests than high-risk patients?

A If you have a high-risk population, you will have more positives, and your chance of capturing a person who is positive and not infected is reduced.

Q Are low-risk population that you're comparing here given the same tests that the high-risk populations are given?

A Yes. In the screening tests.

Q So why the difference between the screening results of the low-risk and high-risk?

A It's numbers. So if I have ten people in a room and only one is positive and then I screen five, if I screen them all, I will have one positive and I may capture an extra positive there, because my screening test is broad enough. I may capture two more positives, but if I had ten individuals in a high-risk population, or nine who are all true positives, and I screen them all, I may have nine true positives and one that I say is not positive. So that's why it's more sensitive. The results are different in high-risk populations and low-risk populations. But that's why it's a screening test and not a diagnostic test.

Q Maybe I was misreading this. I was reading this as saying, that the test itself would be wrong more often in a low-risk population than a high-risk population?

A That's true.

- Q Why? That's what I'm asking, why?
- A Because it's a screening test and we include, the threshold for positivity in a screening test is lower, because we don't want to miss anybody who's positive.
- Q But it's an objective test. I mean, you're pulling, on the test itself you're pulling -
- A But we're talking about screening. We're not talking about Western blot. We're talking about screening.
- Q OK. Who interprets Western blot tests?
- A People at labs. What do you mean "interpret?" Do you mean who actually looks at them and says, this band is positive, that band is positive, that band is positive? And that is done by lab personnel. So the interpretation of what bands are there and what bands aren't there.
- Q Let's assume and you've stated on page 8, that there are guidelines from the CDC that require reactivity to two of the following antigens, either p24, gp41, gp120/160, for a positive classification. Who makes the determination? Who interprets whether these proteins are present?
- A Whether or not the bands are present, that's the lab personnel.
- Q And if the lab interprets that these proteins are present, what happens next?
- A They have criteria, diagnostic criteria. And if the Western blot meets diagnostic criteria, they will say this test is positive. And they also should be able to give you the band lengths where positives, they should be able to tell you where the Western blot bands were identified.
- Q So assume that a blood sample goes to a lab. The lab gets it. They do an EIA and it's reactive. They do another EIA and it comes up what's termed as repeatedly reactive, and then that blood sample is goes through a Western blot and a number of the bands line-up in the right order to trigger a positive Western blot result. Assuming all of that is true, at what point is the patient considered HIV positive? Was it after the EIA lit-up the first time, the second time, or the Western blot?
- A It's after the positive Western blot.

Q So at that point you have a positive HIV patient, correct?

A Uh-huh.

Q And those results are then sent where?

A Back to the physician.

Q I have some examples here of labels, that are on some of these tests. Have you ever looked at any of these labels? Any label at all for any HIV test?

A I saw one label, yes.

Q What label did you see?

A I don't remember.

Q Was it in response to this case, or was it something else?

A No, it was just at our lab.

Q Did you have the occasion to flip through and look at the label?

A Yes.

Q Is your understanding of the process that we just talked about, where the EIA is repeatedly reactive, the Western blot lights up, the positive test result is given, the patient is at that point considered HIV positive and then the lab report is sent back to the doctor, is that understanding of the way it works consistent with what you read in the HIV test kit label?

A I don't remember if that was in there.

Q Do you know what -

A That's a process that's defined by the scientific community, the medical community, not by a lab company.

G. BARON COLEMAN: It's 11:50, Dan and Doug, Doctor. And I'm about to make an obvious transition from background to Tony [REDACTED] specifically. Do you want to stop and go to lunch and enjoy it, or do you want to go another ten or fifteen minutes and make an awkward transition?

DAN VANDIVIER: I trust you, counsel.

G. BARON COLEMAN: I think it would make more sense to go to lunch and that way we don't end up having to repeat anything. This will make

a nice clean break. I'll leave it up to you how long, thirty minutes, forty minutes, whatever.

DAN VANDIVIER: It's ten 'til twelve right now. Do you want to say 12:30 to be back, Doug?

DOUG CUMMINS: That's alright with us.

REPORTER'S NOTE:

Lunch break taken.

DIRECT EXAMINATION CONTINUES

QUESTIONS BY G. BARON COLEMAN

Q We'll switch now to page 10. Just a reminder, Doctor, you're still under the same oath. It's just a continuation of the same deposition. At the bottom of page 10 here you say, I'm assuming that "TP" stands for Tony [REDACTED] presented to Dr. McPike, for unknown reason, and was given a screening test for HIV-1. You reference that as Exhibit 1 -

A That was a formatting issue.

Q So just to be clear, from here on out when we were talking numbers before, those were Roman Numerals referring to your citation list. Now we're talking Arabic Script Numeral to your exhibits. I don't care. That's fine. As long as everybody is clear on it. You reference Exhibit 1 here. And if you look at Exhibit 1, if you would turn to that for me. It's a document identified as Confidential Report of Communicable Diseases.

A Thank you. OK.

Q Who filled out this form?

A I don't know. I assume it was Rachel Thompson.

Q I'm sorry, I didn't hear the last part?

A I assume it was Rachel Thompson.

Q Do you know Rachel Thompson personally?

A I don't. No.

Q It just says, R. Thompson on my copy.

A Oh, sorry, R. I don't know where I got Rachel from.

Q If you know Rachel, then I'm gonna -

A No, no, I don't know Rachel. Sorry. And I don't know that it was Rachel. No, R. Thompson.

Q So we don't know who actually set pen to paper on this document, is that correct?

A We don't.

Q Do we know where it came from?

A Well, it came from our files at the State Department of Health. Is where I got it.

Q Do you have an original on file somewhere?

A Probably. I don't know.

Q And you state on here that he was given a screening test for HIV-1. Where is that referenced on this document?

A He was given a lab test, ELISA.

Q So when it says, ELISA 1 and 2, that is the same as the EIA you referenced on the bottom of page 10?

A Yes.

Q What lab received that ELISA test? Where did it go?

A I don't have a copy of the lab return ticket.

Q Do you know what brand name ELISA test kit was used?

A No, I don't know that.

Q I also see here where it has WB+ and it's circled there on that same line. What does that mean to you?

A Western blot positive.

Q Where is the lab slip for that test?

A I don't have that Western blot test.

Q Do you know what lab that test went to?

A I don't know.

Q Do you know who ordered the test?

A Dr. McPike.

Q Do you know who -

A I assume it was Dr. McPike. He's the one who saw Tony [REDACTED] and ordered the ELISA. He's the name of the physician who is listed on the

form.

Q Do you know what brand name Western blot test kit was used?

A I don't know.

Q Do you know the date of the collection? The date the specimen was collected, drawn out of his body?

A It says, 1/9/04.

Q So on 1/9/04 they do a blood draw?

A Uh-huh.

Q That blood is sent to some lab, but you don't know?

A Right.

Q And it was tested via a test kit, you don't know?

A Right.

Q By a lab assistant that you don't know?

A Right.

Q And it produced presumably a lab slip that you don't have?

A Right.

Q Somehow somebody that you don't know inputted that information on this sheet, is that correct?

A Right.

Q What signs and symptoms did Tony [REDACTED] present with on the day he had his blood drawn on 1/9/04?

A I don't know.

Q And what day was his blood actually run through the test kits?

A I don't know. I assume it was the 1/12/04, date of diagnosis.

Q Where is that?

A It's under the etiologic agent HIV.

Q And that 2 looks like it's been scribbled over, but that's the way you read that, a 2 there?

A I do, 1/12/04.

Q But it's possible that it was something else and later somebody came in and changed that?

A It's possible.

Q Do you know, well, we don't know what the lab kit was?

A No.

Q So we don't know what the lab specifications were for how long that blood was permitted to be stored before it was processed, do we?

A I don't know.

Q And we don't know at what temperature that specimen was suppose to be held in storage until its processed?

A No, I don't know.

Q Do we know whether the lab assistant followed all protocols and procedures?

A I don't know.

Q And do we know what date the doctor received the lab slip back from the lab?

A I don't know. The report was filed the 15th.

Q So you would think it was sometime before the 15th?

A Yes.

Q Does anything in this document represent any physical, or clinical examination that took place on Mr. [REDACTED]

A No, not on that date, or any of those dates. No.

Q When you say, "any of those dates," do you mean 1/9 and 1/12 and 1/15?

A Right.

Q I'll switch you over to Exhibit 2 you have here. You say in your affidavit that Tony [REDACTED] "Engaged in sex with prostitutes," and you go on to say that that places him in the high-risk behavior, is that correct?

A Yes.

Q Prostitutes on your affidavit was plural, correct?

A Yes.

Q And you referenced Exhibit 2 for support for that proposition, isn't that correct?

A Uh-huh.

Q If we look at Exhibit 2, towards the bottom of that first paragraph, the

second line from the bottom, it says; "Also stated patient became infected through sex with prostitute," singular, is that correct?

A No, I read that as prostitutes.

Q Do you see an 's' at the end of that word?

A It looks like an 's'.

Q Why would that place him in a high-risk classification?

A Because HIV is a sexually transmitted disease.

Q What do you mean by high-risk, how high is the risk of transmission in that situation?

A I can't quantify it.

Q Has anyone ever tried to quantify it?

A That, I don't know.

Q Have there been any studies that show the risk of female to male transmission?

A Yes, but I don't know. I can't tell you which ones they are. I haven't seen that.

Q But you have seen those studies?

A Yes.

Q I'm trying to figure out, I mean you use the phrase "high-risk," I'm trying to figure out what you mean by "high risk?"

A This is a high-risk, patients who are at high risk for HIV disease are men having sex with men. People who are in, who are in polygamous relationships, or have multiple partners. IV drug abusers, who don't use clean needles. And it used to be hemophiliacs and people who had blood transfusions.

Q I'm trying to understand what you mean by "high-risk." I understand that there are several -

A He exhibited high risk behavior.

Q Let me get the last of my question out. I understand that there are segments of the population that you classify as high risk. I'm asking, what do you mean by high risk? Like how high is the risk? Is it every sexual contact? Every other sexual contact?

A I don't know the answer to that question.

Q So why are you using the phrase "high-risk?" Where did you come up with that phrase?

A Because the standard, those are the clinical, the criteria you, patients are considered at risk for HIV when they have engaged in high-risk behaviors. And those high-risk behaviors are as I mentioned earlier. That's the clinical, sort of protocol that we follow.

Q So you're using this as just sort of, well, that's what other people say?

A That's the medically recognized language.

Q But you don't know what it means?

A It means that they are more likely to have HIV infection than people who don't have, engage in those kinds of behavior.

Q How much more likely?

A I don't know.

Q And just to clarify, and it's muddy on the transcript sometimes and uh-huh, or huh-uh can come across very difficult to, and I don't want to put the transcriptionist here in a difficult position trying to figure out exactly uh-huh, or huh-uh. So if we could go yes or no. And if I followup on that, I'm not being rude. I'm just trying to keep it clean. Do you know Dr. McPike?

A I don't.

Q Have you ever spoke with him?

A No.

Q Did you receive his records?

A No.

Q Would you say that he was the first doctor to diagnose Tony [REDACTED] HIV-positive, that you're aware of?

A He was the first person to diagnose Tony [REDACTED] positive. He was not the first person to suspect HIV. And those are medical records that you don't have yet. That I'm aware of. It's in the stuff he gave you.

Q I looked at those. Who?

A The emergent. The hospitalization in 2001. When the physician

recommended that Tony [REDACTED] have a followup HIV test after discharge.

Q If I understand what you just said, you said that you do not have McPike's medical records?

A I don't.

Q So you don't know what clinical presentation Tony [REDACTED] had the first day he went to McPike do you?

A I don't. I have an emergency department visit from one month prior to his visit to Dr. McPike. Which showed that he had a candidal skin infection.

Q But I'm talking about when he goes to McPike?

A I don't.

Q You don't have medical records?

A I don't have those records. We're trying to get them.

Q And you don't know what his clinical presentation was?

A I don't.

Q Would the clinical presentation be relevant to you in that situation?

A Would it be relevant? It would not change the diagnosis. It would be interesting.

Q Who is trying to track down McPike's records for you?

DOUG CUMMINS: We are.

Q Are you actively trying to get them, or are you actively trying to get them?

DOUG CUMMINS: I am.

Q Has he sought a protective order?

DOUG CUMMINS: No, we filed a court ordered subpoena because of the way the doctor's release for HIPAA, we have to have a court ordered subpoena normally to get those. I've requested that. And then we'll take it to McPike's office.

A I made a phone call to McPike's office, but apparently he has switched practice sites. So I didn't pursue it any farther than that.

Q You reference here and it's sort of confusing to me, I'm just trying to get

some clarification.

A Sure.

Q After you say, "Placed in the high-risk category," the next thing it says; "The screening test. The screening EIA test was sent to Quest Diagnostics." What screening EIA test were you talking about? You reference three, Exhibit 3. Oh, no, you don't reference anything. That's why it was confusing to me. I'm at the bottom of the paragraph, page 10.

A Those records, I believe, this is not numbered. This is 5. It was very difficult to sort through all of these lab records. But we have a running log of lab results. I believe that the first, do you have Exhibit Number 5 in front of you?

Q Yes.

A So I think that the lab results that are dated 1/2004, are the lab results that were drawn at that visit with Dr. McPike.

Q And you believe that's the one referenced in the bottom paragraph on page 10, where you say, "The screening EIA test was sent to Quest Diagnostics?"

A Yes, I think that's what I was talking about. And I'm sorry that I'm not clear on that, but it appears that once he was referred to Wishard, the whole process was started all over again, at the end of January. So I have lab results from the end of January also.

Q Do you have the lab result that was sent to Quest Diagnostics-Nichols Institute and reported to be positive?

A No, just from, I don't have it, I'll have to find that. I'm sorry. I don't know. This is 1/29, so that's referenced 3. This date of service is 1/29/2004. This may actually be the second set of labs that he had done in January.

Q And you're looking at Exhibit 3?

A Yes.

Q That's not an EIA, that's a Western blot, correct?

A Right. Western blot.

Q I'm asking, do you have an EIA slip?

A You know what, I'll have to look through these and can we send that to you if, and when we get records from McPike's office.

Q Why do you want McPike's records?

A Because I'd like to see the lab, I would like to see the actual labs.

Q Would it cause you, anything in there gonna cause you to change your affidavit?

A No.

Q So why do you want them? I mean, you've testified pretty vehemently in here that your opinion is what it is.

A Right.

Q And if it's not subject to change, what can McPike's records do for you?

A They just add to the level of certainty. Which I think is under question.

Q Under question by you?

A No. That would be you.

Q You said the process was started all over when you went to Wishard, is that where you say he went?

A No.

Q Why was it started all over?

A That might be their protocol. I don't know. Sorry about that, that is a little bit confusing. I apologize for that.

Q So as of 1/29/04, where we are in our affidavit here, we don't have an EIA, or Western blot from the first draw that we talked about. And we don't have an EIA from the second draw? That's where we are, correct?

A It's difficult to tell with this, because there isn't a date in there. Here is the Western blot. So let me see if there is an ELISA in the records. You can keep asking me, and I will keep looking.

Q Let's go to 3, what's that? If you're ready to move on, or if you need more time?

A No, no, go ahead. I can listen and look at the same time.

Q Exhibit 3, is what you refer to as a "reflex Western blot." What is a reflex Western blot?

A It means a test that's done, if you have a positive screening test, then the lab will automatically run the Western blot test.

Q You said that this was also reported as positive, is that correct?

A Yes.

Q And that's what you have attached to Exhibit 3, correct? Do you know what brand of Western blot test that is?

A I don't. You can get that by calling the hospital lab.

Q If you don't know what brand it is, you have not read the label, I assume, of that test?

A The only thing I know is what is listed on the lab sheet.

Q Do you have medical records from this visit that's prompted this test?

A No.

Q Do you know what date the specimen was drawn?

A Yes. Oh, I do actually. I have this.

Q Is this some of the medical records from the day that the specimen was drawn?

A I don't know what I have.

Q What you handed was a consent to test, correct?

A With a duty to warn.

Q But these aren't actual medical records of his? This document you just handed me doesn't have any signs and symptoms and complaints that he came in presenting with those?

A No, it doesn't.

Q Do you have any medical records that show what signs, symptoms and complaints he presented with on that date, on the date the specimen was drawn?

A I don't think there are medical records for that date. I think that's another, that was another date that I asked. No. I think the medical records start later than that.

Q Have you tried to get the medical records for these dates?

A I sent a list of the medical records to Doug.

Q Why would you need those medical records?

A I'm just interested.

Q Why do his medical records for that date interest you?

A Again, just to present inconclusive evidence, or conclusive evidence. Sorry.

Q I'm assuming in the affidavit you felt that it was conclusive or you wouldn't have -

A I did, yes.

Q And you're saying there's something in there that could be more conclusive than -

A No, it's just additional information. I don't think I have medical records for that date.

Q Do you know the name of the lab assistant that drew the blood?

A No.

Q Or that processed the blood?

A No.

Q Do you know the name of the phlebotomist that drew the blood?

A No.

Q Can you establish a chain of custody for any of these tests?

A No.

Q Can you establish a chain of custody for any of these tests that we've talked about up to this point?

A No.

Q Do you know whether the blood drawn, and I'll go ahead and give you the answer, it was drawn on, it looks like either January 26, or January 29, I'm not sure which, on Exhibit 3 here. Do you know how it was stored from the moment it was drawn -

A No.

Q Let me finish my question. Do you know how it was stored from the moment it was drawn until it was processed by the lab?

A No.

Q Do you know what time of day the test was drawn?

A Does it say on the lab book? I don't.

Q Do you know if there's a sample on file somewhere that could be retested?

A I don't.

Q Do you know if that's part of the routine EIA, or Western blot policy is to keep a sample stored on file that could be retested?

A I don't.

Q And I'll give you an example, who's the bicyclist, Lance -

A Armstrong.

Q Armstrong, was accused in France of cheating during the Tour de France, and many years they were able to go back and pull the original blood and urine specimen and retest it?

A Right.

Q Do you know whether these labs have kept samples of this, that if we wanted to we could go back and retest?

A I don't know that.

Q And I think I asked this, but I'm not sure. Have you read the label for the test that was used?

A No.

Q Do you know any of the limitations, or indications that are contained in the label?

A No.

Q Do you know any other viruses, or bacterial infections that Tony [REDACTED] had on the date the specimens were drawn?

A I don't.

Q Do you know whether Tony [REDACTED] was suffering from an autoimmune disorder on the date these specimens were drawn?

A I don't.

Q Do you know whether he'd had a recent flu infection, or flu vaccine on the date the specimens were drawn?

A I don't.

Q What steps did you take to find out any of those issues?

A I reviewed his medical records, but I was not interested in -

Q You just told me a second ago that you didn't have medical records.

A I reviewed the information that I had.

Q But up to this point you have no medical records, correct? Up to this point, and Exhibits 1, 2, 3 and 4, or 2 and 3, we have no medical records?

A Those are considered medical records, the labs that you have in front of you. That's what I had.

Q They're not prepared by a doctor, correct? You said that you didn't know who prepared 1. This looks like a nurse note in 2, and this is a lab slip. You don't have any doctors' records at this point, do you?

A I don't know. There may be a physician who is responsible for writing the lab reports.

Q You don't have any signs, symptoms, or complaints that Tony [REDACTED] presented with for any of those?

A No.

Q Look at Exhibit 4 here. You said in your affidavit on page 10, A viral load run that demonstrated 283,030 copies of HIV RNA, and it looks like per milliliter. As I put my scientific hat on for a moment. Do you see what I'm talking about at the bottom of page 10?

A Yes.

Q What does that mean to you?

A It means that he has HIV RNA, that has been identified.

Q Whole complete cultures of HIV RNA? Or whole complete specimens of HIV RNA?

A It means he has RNA, HIV RNA that has been identified by a PCR test.

Q And I'm asking, is it whole, complete specimens of HIV?

A I don't know.

Q The number 283,030 per milliliter, am I reading that correct?

A Yes.

Q Is that per milliliter of the sample of blood?

A Per milliliter of, yes, of the sample that was tested.

Q I did some rudimentary math here. Assume for the sake of argument, assume for this hypothetical that the human body has about eight pints

of blood in it. And that Tony [REDACTED] had about the same amount of blood in his body on the date that specimen was drawn. Multiplying that number, 283,030, by the number of milliliters in a pint by eight pints would give Tony [REDACTED] somewhere in the neighborhood of over one billion of copies of HIV in his body. According to what you just said, is that your understanding of how these PCR tests work?

A I have never heard it described like that.

Q You just said a moment ago that the way you understood this sentence was, that there were in the milliliter of blood that was tested 283,030 copies of HIV.

A Uh-huh.

Q Is that correct?

A Uh-huh.

Q Could they have gone into that milliliter of blood and pulled out just a single one of those copies and cultured it?

A I don't know.

Q Do you know whether they did that?

A I don't have a record of culture. It wouldn't be something that would be routinely done.

Q Would that be relevant to you if they had done it?

A No, because we don't need it.

Q What is HIV-1 RNA Ultra-Quant, do you know what that means?

A That must be the type of test that they did.

Q Have you ever looked at that test kit?

A No.

Q Have you ever looked at the label?

A No.

Q Do you know whether that test is still on the market?

A I don't.

Q If I submit to you that that test was a recall and it's no longer allowed to be given, would that have any relevance to you whatsoever?

A No.

Q Why not?

A Because I don't need this piece of information to make the diagnosis.

Q Then why is it included in your affidavit?

A Because it's supporting documentation that we had available.

Q But you don't need it?

A So an affidavit only requires the minimal amount of information.

Q No, I'm just curious why you put it in there if you don't need it. Do you know of any other PCR tests you have on file that show that there were copies able to be detected in Tony [REDACTED] blood?

A Yes.

Q Can you point those to me, or point me to those?

A Maybe.

Q What page are you on?

A From 2008.

Q This is just a summary sheet. Do you have the actual documents?

A Yes.

Q And are those included in your affidavit?

A Are they? They should be. I may not have included those. In 2001 when he was acutely infected.

Q I'm looking through your affidavit. I don't believe you did.

A I probably didn't say it. Sorry about that. Here they are. You have that one, I believe. I sent you the Genotype, right? Do you have that?

Q I have the viral seek -

A Yes.

Q And this is a PCR.

A I know. I came across it. I was making sure that you had one.

Q Is this the one you're saying, is from August 27, 2008 blood draw?

A Is that the date on that?

Q It's August 23, and it's a PCR.

A There may have been another one that was during the hospitalization for Pneumocystis pneumonia and he had been, he had stopped taking his medication. And they had restarted him on medication.

Q Do you want to go with this one?

A Sure.

Q What does this document tell you with respect to Tony [REDACTED]

A It tells me that HIV RNA was detected.

Q In what amount?

A And it tells me that he had, I had questions about this amount also, because it's different than the one that we have on our sheet. There's one from 7/2.

Q So did you come up with a number on this document that I'm looking at?

A To me, I was reading that as one million, six hundred thousand.

Q One?

A One million, six hundred thousand copies.

Q Even though the one and the six hundred thousand are in different places?

A Yes.

Q But this isn't on your summary sheet?

A It is, well, is it a different date?

Q Yes.

A This is the one that's on the summary sheet. No, it's on the front page. This one.

Q Now this was taken after he was arrested though, right? Yeah, this is August after he was arrested.

A Uh-huh.

Q Do you have one before he was arrested? That's like giving a driver a DUI because he was drunk two weeks after an accident. Do you have one from before he was arrested?

A There's one in 2008. So we have a PCR from 8 of 2010, you're saying that one is too late, even though this is not required to make the diagnosis. You are, here's one in 8 of 2008.

Q Do you have the slip from the one from 2008?

A I have the record here. I don't have a copy of that.

Q Do you the lab that performed that, what brand name, test kit was used?

A I don't.

Q What the limitations are on that test kit?

A No, I don't.

Q Have you ever reviewed the label?

A No. And then here's another one from 7 of 2010, for a million, eight hundred and twenty thousand copies.

Q That was also after he was arrested. I'm saying before March or February of 2010, do you have anything, any lab slip?

A I don't have -

Q You know what lab it was done at?

A I don't. I'm assuming that one was at Wishard, 2008.

Q And this is just a medical summary, right? I have paralegals that do this stuff.

A It was drawn August 27, 2008. Is that the right one?

Q That was the one you have on the summary.

A And here is a note by the physician. It doesn't say what his viral load was. But it says that his viral load was less than four hundred.

Q Isn't it undetectable often -

A This was detectable.

Q Well, let me finish my question. Isn't it undetectable often phrased in less than, less than fifty, less than a hundred, less than five hundred, depending on the test and the test kit labels?

A Yes, it depends on the threshold for the test, but this test for that threshold, a lower threshold and recognized. There were thirty-nine copies.

Q I'm sorry. I didn't catch that last thing? Do you have the August lab slip?

A I have the physician note. I don't have the labs.

Q Can I see the physician note?

A If I can find it. Here it is. This viral load was from, sorry, this is from, these are going backwards and not forwards. This was from 5/2007.

Q Is that referenced in your affidavit?

A No, it isn't.

Q Is that referenced on your -

A No, it isn't. Well, it might be, and it might have said, yes, it says, below limit. That's why I didn't reference it.

Q May I see it.

A He was being treated at that time.

Q Where does it say "below limit?"

A Here, it says that on mine. It says, less than four hundred on that one.

Q OK. Go back to my question. Isn't sometimes non-detectable written as less than a certain number?

A Sure. Yes. Uh-huh. It depends on the threshold.

Q So it's your understanding that the threshold for this particular test is whatever HIV PCR test they used was less than four hundred, correct?

A Yes. That's the way it was reported.

Q Which would make this non-detectable at this time, correct?

A Yes, according to that lab.

Q Do you have any lab anywhere where it shows that he had a detectable viral load label where the test was later not recalled?

A I have a report in there. I'm not sure that I have the lab here. I can continue to look for that. We can try to get that.

Q So when you made your affidavit at the time you created it, you crafted this affidavit using a recalled test -

A No, I -

Q Let me finish the question. You crafted this affidavit using a recalled test, with no other lab slips in your possession showing that he had a detectable PCR load, is that correct?

A No, that's not true. I have labs from 2010. You said that -

Q Oh, I'm sorry, pre-arrest. Anything that's after arrest, I don't, I'll let Doug make the call on his end. I'm not worried about anything after the arrest. After the arrest, like I said, it's like giving a guy a DUI for an accident two weeks ago because you found him drunk yesterday. It doesn't do much for me. So let me re-ask my question. When you

crafted your affidavit you used a test that had been recalled, you have no other PCR test at the time you crafted your affidavit in your possession that shows detectable PCR load, is that correct?

A I have referenced PCR tests.

Q Then give them to me.

A They're in here.

Q Again, paralegals have created those. That's not admissible. No one is never going see that.

A That's not a paralegal.

Q I understand that. But that's not a doctor's note. That's not a medical record. That is a summary of something. I'm saying, something where somebody could come in and swear, yes, we created that document at our office. Is this the only medical record that you have, this summary?

A The only medical record for what?

Q That shows that he had a positive PCR test, showing something other than non-detectable, that wasn't recalled before he was arrested?

A There are four or five positive PCR tests on that. Two of which were after the time of your, the period of time that you're interested in.

Q Do you have any from before, any lab slips, that you can tell me the brand name that was used, the lab that it was done in, the doctor who ordered it?

A I don't.

Q From before he was arrested that shows a detectable level on a PCR test? Do you want me to repeat it?

A No. That's fine.

Q I need an answer.

A That is what I have.

Q And even though this test was recalled, have you read the label for this test?

A No.

Q Do you understand the limitations of the procedure that are outlined on

the label?

A No. I have no read it.

Q If you're done, I'll go to Exhibit 5. And if you want to keep looking for a PCR test.

A I can keep looking while you're asking questions.

Q Let's go to Exhibit 5. In your affidavit you say that there was a CD4 test performed and a 123 CD4 count. Confirming AIDS diagnosis per CDC guidelines. Do you have a copy of that CD4 test?

A No.

Q Do you know what lab performed that test?

A No.

Q Do you know what doctor ordered that test?

A No, I don't.

Q Do you know what time of day it was taken?

A I don't.

Q Is that relevant to you?

A What time of the day it was taken, no.

Q Why not? Why is that not relevant?

A Because it's below the threshold for the diagnosis of AIDS.

Q I know, but I'm saying, why is it not relevant what time of day a CD4 count was taken?

A Because he meets criteria, so it doesn't matter.

Q Do CD4 counts fluctuate with time of the day?

A They may fluctuate with the time of the day.

Q Are they higher or lower in the morning?

A I don't know the answer to that.

Q Are they higher or lower fasting?

A I don't know the answer to that.

Q Are they higher or lower after sun exposure?

A I don't know the answer to that.

Q Is that relevant to you?

A No.

Q Why?

A Because he's below the threshold for diagnosis.

Q I'm gonna stop you there. That's saying it's not relevant because it showed 'X', so I know it had to be 'X'. I'm asking, is it possible that it showed 'X' because of some variation, sun exposure, whether he was fasting, or not fasting. Do you know if he was infected with anything else at the time?

A I don't know the answer to that.

Q Do you know anything else about it other than, at a snapshot point in time it had a 123, allegedly, that we don't even have a lab slip for?

A No, I don't. You can ask Dr. McPike.

Q Why didn't you ask Dr. McPike, you're the one that testified with an affidavit that this stuff is accurate? Why do I have to ask Dr. McPike?

A Because you don't believe the record.

Q I'm not doubting the record. I'm asking you questions about a lab test that came back, that you don't have.

A No.

Q So far we've gone through five exhibits and you don't have anything that has not been recalled on any five of them. And you don't know any medical records surrounding it?

A No.

Q You know nothing about how CD4 counts react over the course of the day?

A No.

Q You don't know whether CD4 counts rise or fall?

A No.

Q Have you ever looked into diurnal variation CD4 counts?

A No, I haven't.

Q Have you ever looked into the role that cortisol plays in CD4 counts?

A No, I haven't.

Q Have you ever looked into the role that time of day plays in CD4 counts?

A No. You already asked me that. No.

- Q Sun exposure? Viral infection? Bacterial infection? Parasite infection? Sepsis? Tuberculosis? Burns? Trauma? IV injection of foreign proteins? Non-nutrition? Over exercising? Steroid use? Psychological stress? Social isolation? Have you ever looked into any of those things that have to do with CD4 variation?
- A No, I haven't.
- Q Why not? Assume for the sake of argument, assume for this hypothetical that there are studies that show each of these things can impact CD4 counts, cause them to lower. Is that relevant to you?
- A It is not relevant.
- Q You're citing a low CD4 count for evidence that he has AIDS, correct?
- A Yes.
- Q And you don't think anything else that causes a CD4 count to go down is relevant? What's the clinical definition of a CD4 count? What causes someone -
- A Below 200.
- Q And you don't care if there's anything else in the world that can push -
- A If you were a 195, that may bear some relevance, but, no.
- Q How do you know without looking into it that 123, it can't push it down to 123, but may be able to push to 195?
- A You don't. So I can't assume anything.
- Q So why didn't you look into it, is what I'm asking?
- A Because he wasn't my patient. I'm not diagnosing him.
- Q No, but you are testifying that he was -
- A He meets -
- Q Hold on. You're testifying that he has incontrovertible diagnosis of HIV infection and meets the criteria for the diagnosis of AIDS. Those are your words, not mine. Those are your sworn words. That were filed in a supplemental state's witness and exhibit list.
- A That's exactly right.
- Q Do you stand by these words?
- A Yes.

Q Everything in here?

A Yes.

Q You swear to them as if they're true even though you didn't sign it?

A Yes.

Q And it's not relevant to you if there is anything else in the world that can be causing these results?

A He's fit the criteria for the diagnosis of HIV and also AIDS.

Q I understand that. What I'm asking is, is it relevant if something else is causing that criteria?

A No, he's met the criteria.

Q Is it relevant if something else was causing the criteria? If my wife is dead on the side of the road and you say, well, you murdered her, is it relevant whether or not something else may have killed her? Yes. What if she was hit by a truck? I'm asking you, he's dead on the side of the road, you concluded that he's HIV-positive and has AIDS. I'm asking, is it relevant to you if anything else is causing the CD4 count to go under 200? That's what I'm asking you. And you're saying so up to this point, no, that it's not relevant, but something else may be causing CD4 counts to go down.

A I'm saying that for a medical diagnosis of AIDS, it's not necessary to entertain all of those options that you have put-forth. That we have criteria that we need to meet in order to establish a diagnosis, and we have met that.

Q Who sets that criteria?

A The CDC.

Q So did you do anything when you concluded in your affidavit that there's any controvertible proof, did you do anything to rule out any of those issues that I've listed, starting with diurnal variation, cortisol, time of day, sun, going all the way to psychological stress?

A No.

Q When the CDC set the criteria for a CD4 count of under 200 being classified as AIDS, do they tell you not to rule anything else out because

- it's absolute stone-cold fact that once it goes under 200, everything else is irrelevant?
- A No.
- Q I know that you didn't rule it out, but do you know whether Tony [REDACTED] had a viral infection when this CD4 count was drawn? Do you know if he had socially isolated any psychological stress, was using steroids, over exercising, had non-nutrition?
- A I don't know.
- Q You know he had a bowel disorder, right? You referenced that.
- A Right.
- Q What are things that's used to treat bowel disorders?
- A A bowel disorder was not at this time when he had that CD4 count.
- Q You said that he'd been complaining of it for nine years.
- A Right. Again, that's just what I've read.
- Q Can bowel disorders cause malnutrition? Are they sometimes treated with cortisol steroid use? Can they be caused by parasitic infection, viral infection?
- DOUG CUMMINS:Is that one question, or four? Now you're just being argumentative.
- Q No, I'm not. I'm asking -
- DOUG CUMMINS:You can ask one question and let her answer it.
- Q Can bowel disorders sometimes be treated by cortisol steroid use?
- A It would depend on the bowel disorder.
- Q Can they lead to malnutrition?
- A Again, it would depend on the bowel disorder.
- Q Can they be caused by a parasitic infection?
- A Yes.
- Q Can they be caused by a viral infection?
- A Yes.
- Q Can they cause cortisol levels to rise?
- A Yes.
- Q And he was suffering with a bowel disorder?

A We don't know that.

Q And that's not relevant?

A We don't know that.

Q Where did Exhibit 5 come from?

A That's from the State Department of Health. Which is Exhibit 5? Yes, it's from the Department of Health.

Q Do you have records for each one of these? Do you have lab slips for each one of these results that are on here?

A No.

Q Do you have lab results for any of them?

A What do you mean, do you mean the lab report?

Q Correct. When I say slip. Like this is a lab slip, Exhibit 4.

A I have all these records.

Q For each one of these entries?

A For some of them.

Q Have you ever gone online and try to find any of the labels for any of these tests that were used in this record?

A No.

Q Is anything that's said in the label relevant to you?

A I suppose it would depend what it was. How to run the test. It would be if I were running the test.

Q Look at 9d for a second. We're going out of order, but since you brought it up. 9d was referencing an OraQuick Advance test. If you look at the label for the OraQuick Advance test there are limitations. And among the limitations, I'll take them one by one and let you tell me if this is relevant. A reactive result using the OraQuick Advance Rapid HIV-1 to antibody test suggests the presence of HIV-1 and/or 2, antibodies in the specimen. It is intended as an aid in the diagnosis of infection with HIV-1 and/or 2. AIDS and AIDS related of clinical syndromes that a diagnosis can only be established clinically. Is that relevant?

A It's a screening test? The OraQuick Advance is a screening test?

- Q Correct.
- A So I would expect it to have a high sensitivity and it would be lower. So I would expect to see some false/positives. And it should never be used in isolation.
- Q Another limitation. A person who has antibodies is presumed to be infected with the virus. Is that a relevant limitation?
- A It's a screening test.
- Q It's a presumption, correct?
- A Yes.
- Q Now this isn't talking about the screening, this is making a blanket statement about a person who has antibodies to HIV-1 or 2. It says, it's presumed to be infected with the virus. Is that relevant?
- A It would depend on how those were confirmed. If you had confirmed it with Western blot.
- Q This isn't talking about confirming. This is saying; A person who has antibodies to HIV-1 or 2 is presumed to be infected with the virus.
- A Yes.
- Q Clinical correlation is indicated. Is that relevant to you?
- A It's relevant only in that, every lab that's done, or comes across, or any radiologic study that is done on a patient has that same disclaimer. It's a medical disclaimer, like the ones you were showing me earlier.
- Q So you don't believe it?
- A No, it's not that I believe it, or don't believe it. It's what is said, it's not specific to this test.
- Q It's in the test and it says; Clinical correlation is indicated.
- A Yes. Every test says that; Clinical correlation is indicated.
- Q Medical evaluation and possibly additional testing to decide whether a diagnosis of HIV infection is accurate. Is that relevant?
- A Is it relevant, it is what I would expect to see as a disclaimer on a lab. It doesn't surprise me.
- Q If the test they're using was calling for clinical correlation, would the clinical notes be relevant to you?

A Would the clinical notes be relevant to me?

Q As clinical presentation?

A As a physician clinical presentation is always relevant.

Q Then why didn't you cite any in your affidavit?

A I didn't have it available and it's not required.

Q So it's relevant and it wasn't available -

A When you make the diagnosis. I did not make this diagnosis.

Q Clinical presentation is not required for a diagnosis, is that what you're saying?

A I didn't make the diagnosis.

Q But is it relevant for a diagnosis?

A Clinical presentation is, seeing a patient, getting a clinical history is always relevant for a diagnosis, as his sexual history, as his history previously, previous infections with sexually transmitted diseases. As are presenting symptoms. Candidal dermatitis, for example. Or acute HIV infection in 2001, with a viral syndrome, for which he was hospitalized for six days.

Q That is not in the record.

A It's in the additional record.

Q I didn't ask you about that. I'm asking you -

A I'm -

Q I'm letting you go because I'm nice. But I'm gonna stop you. I asked you a specific question. If clinical correlation is indicated and required by the labels -

A Clinical correlation -

Q Let me finish. If it's relevant and required by the labels, how were you able to make your conclusion in your affidavit when there is no clinical record in there?

DOUG CUMMINS: Can you take us off the record for a minute.

G. BARON COLEMAN: Yes.

REPORTER'S NOTE:

Short break taken.

DIRECT EXAMINATION CONTINUES

QUESTIONS BY G. BARON COLEMAN

Q So my question was, if clinical correlation is relevant and indicated by the labels, why is it not in your affidavit? How were you able to make your conclusion without it?

A I did not make the HIV diagnosis. That HIV diagnosis was made by physicians at St. Francis Hospital, by physicians at Wishard Hospital.

Q Right, but you're testifying that they're correct.

A Absolutely. Based on the labs.

Q But you don't have the minimum necessary standards to even make that determination.

A I do.

Q The lab label -

A I have -

Q Let me finish.

A I have a hospitalization of a patient with Pneumocystis pneumonia.

Q Why isn't it on your affidavit?

A It is in my affidavit.

Q Where? Where? I don't see it.

A In July, 2010, TP developed shortness of breath -

Q Where are you at?

DOUG CUMMINS: Page 12.

A And was hospitalized at Wishard Hospital. A bronchoalveolar lavage -

Q What paragraph are you on?

A Down on the second paragraph. Was performed, and the culture was positive for Pneumocystis pneumonia, an AIDS-defining illness. The culture was -

Q Hold on just a second. Hold on just a second. That was July, 2010?

A Yes it was.

Q He was arrested in February, 2010.

A Listen, my affidavit was not written with the time frame before the guy was put in prison, or after the guy was put in prison. That has nothing

to do with my diagnosis.

Q It has to do with the burden of proof at trial.

A No, it might have to do with your burden of proof, but it doesn't have anything to do with my diagnosis.

Q But you did diagnose him?

A With my evaluation of the diagnostic information that I have available to me.

Q Do you have any clinical evidence at all prior to his arrest date that he had an AIDS defining illness, any clinical correlation, any doctor's notes that you used when you made this sworn statement that the diagnosis was correct from before he was arrested?

A I did not find evidence of an AIDS defining illness prior to his incarceration.

Q We'll just stop there. Let's limit everything pre-arrest. There's no reason to waste our time.

A I disagree.

Q We'll talk about it later. Let's move on to Exhibit 6. Who prepared this report, Exhibit 6a through c?

A Is that from Planned Parenthood?

Q This is from, I honestly don't know. I really don't know.

A Yes, this is from August of '04. It looks like this would have been done at Wishard. No, sorry, this is on ISDH. So this probably would have been, this would have been done by the Marion County Health Department. There it is, Marion County Health Department.

Q That says received, that doesn't say created. Do you know whether they created this document, or whether a physician, or nurse, or somebody else created this document?

A This report, I don't know.

Q Do you know who created this report?

A I don't. Even if I could identify a name, I wouldn't know them.

Q You say here on the top of page 11, the first full paragraph, it states that he engaged in sex with other men and prostitutes, placing him in the

"high-risk" behavior population.

A Yes, there was a report.

Q Where were you getting that from? Because I've seen no other documents that says that he had sex with men.

A I agree.

Q And we don't know who prepared this and it's inconsistent with every other thing I've looked at.

A Yes, I agree. He did however have a history of hepatitis B infection.

Q Where are you seeing that?

A That's in the information that you don't have yet.

Q How is that pertinent to 6? Or are we talking about something else?

A Hepatitis B infection, it's spread sexually, or via IV drug use. Common in the population of men having sex with men. But it also can be seen in, can be found in populations that engage in homosexual behavior. It was checked on one of the forms, that he had a history of homosexual.

Q This is the form, 6a.

A Yes, had sex with male. That's exactly right. Sex with male.

Q We don't know who created this created this document. We don't know where it was created.

A No. And it's the only time I've seen it, too.

Q Yes. And I've not seen it anywhere else.

A Right, I agree.

Q OK.

A That's the only time I saw that. Not that I'm trying to make your life easier.

Q No, no, no. Your role as an expert is just to say what you know. I don't think you're suppose to take a side.

A No.

Q And in your next sentence you said; "The EIA screening test was run at IU's Cerner Lab," and you referenced 7a here. How do you know that's the same EIA test that is discussed on this confidential case report on Exhibit 6?

A The date perhaps.

Q What's the date on Exhibit 7?

A December 4. No. I don't even know. This is the band. Where's the EIS?

Q I'll help you. It's in the middle on 7a, 31 August.

A Oh, yes, reactive. Yes, so 31 August.

Q But I'm asking, how do you know this test goes, this test being Exhibit 7, goes with this document, being Exhibit 6, because I see no name, no date of birth, or anything on here? And if it's here, I'm just missing it. And I'm missing it, because there is it. Alright. I see it, Tony [REDACTED] Do you know what test kit they used for these results on 7a and 7b?

A No.

Q Have you had a chance to review the label from this test kit results in 7a and 7b?

A No.

Q Have you seen a lab report?

A Just this.

Q This is the lab report?

A That's the lab report.

Q This looks like a -

A It's an electronic medical record.

Q Well, yes, this looks like a, where did this come from?

A This came from Wishard Hospital, I believe.

Q It doesn't look like a lab report. Most lab reports, each lab gets its own report.

A Yes. I think that the labs are probably run at IU Health and their electronic medical records system is integrated. So it pops up in the patient's record. But you would have to talk to them to verify that. Because this looks like a lab report.

Q Let's go down to 7b. On 7b you have here your CD4, your CD4, CD8 ratio, your CD3's, cyto interp. At the bottom it says; "Interpreted by: Orazi, M.D." At the bottom of that record on 7b, is that correct?

A Yes. That's what I read.

Q Who interpreted the records for 31 August, 2004, on the EIA and the Western blot?

A I don't know.

Q If you go right above that you have an 8 December, 2004 on the top of 7a and that says interpreted by O'Malley, M.D.

A Uh-huh.

Q Why no doc interpreting the EIA and the Western blot?

A I don't know. If Orazi interpreted all of them and it's just at the end of the record for that day.

Q Have you asked him?

A No.

Q What is your interpretation of this, of the 31 August, 2004 Western blot?

A Strongly positive.

Q And you're basing that on what criteria?

A On the criteria that's in the, that the bands matching.

Q And where did you get that criteria from? The FDA criteria, or CDC criteria?

A That is, where did I get the picture of the bands, that might have been from the National Institute, where did I say that came from?

Q If you go back to the bottom of page 8, you say; "The CDC guidelines require reactivity -

A Yes.

Q So is that the criteria you think is authoritative, the CDC criteria?

A That's what is used the medical practice.

Q I have a book here. This is from the CDC. The Center for Disease Control and Prevention. It's been edited by these two guys. One with a long German name. Have you ever seen this book before?

A No.

Q This is a second edition. It says; AIDS Testing, A Comprehensive Guide to Technical, Medical, Social, Legal and Management Issues. You've

never seen this book?

A No.

Q Open to page 129, chapter 7. Can you read that first sentence into the record and then tell me whether or not you think that's relevant?

A "Although serologic essays are capable of identifying prior exposure to human immunodeficiency virus, they cannot alone demonstrate whether an individual is currently harboring the virus."

Q Is that sentence relevant to anything that we're talking about today?

A I don't know. I'd have to read the entire book and understand what the context is. This was published in 1994. So that's old.

Q Did anything happen in HIV medicine since 1994 that would lead you to believe that's incorrect?

A I don't know. I would need to see -

Q Do you know whether this book is still used and produced and sent out by the CDC?

A I have never seen it.

Q In the ten years between 1994 and 2004, which refers directly what you begin referencing, do you know what the CDC's policy was with respect to whether or not a person could test HIV-positive?

A Yes, we have this, Revised Surveillance Case Definition for HIV from 2008.

Q This is four years after the fact. Do you have anything from 2004 or before?

A I don't.

Q What does less than fifty on document 6b mean to you?

A A low detectable level.

Q And that's 6b, that is August 31, 2004, is that correct?

A Uh-huh.

Q And we're talking about a PCR result, correct?

A Yes.

Q So according to this document, if I understand your testimony correctly, on August 31, 2004, Tony [REDACTED] had undetectable HIV levels?

A Yes, he had already begun treatment.

Q And the only test you have from before this was the recalled test, correct? There was the test from January that was recalled.

A That is the test that was done at the time of, that was done after his diagnosis with AIDS.

Q The test that was done after his diagnosis with AIDS?

A Yes.

Q What test are you talking about? What test is that?

A The one that you referred to as the "recalled test."

Q So at the time -

A He did not need that test -

Q It's your expert opinion that at the time of 6b, the time that was created, he already had an AIDS diagnosis?

A Yes. And he was receiving anti-retroviral drug therapy at that time.

Q Where in the medical record does it say that? This is March of '05. We're talking about August of '04. Maybe you're looking at a date that I don't have. This is 8 December, 2004.

A Right. This is 9/2004 right here. This is when it was printed. Here's the date.

Q It says, 9/09. Maybe that's September 9. I don't know what that means. That looks like 9/04.

A If this was printed off, but he wasn't seen in '09. This is, these are labs that were drawn 9/04. You're right, this visit was March of '05.

Q These labs, CD4 counts, and this says -

A Right. And these are the meds that he was on and then I believe he had a medication change.

Q But this document here -

A Here's a document from 8/31 naming his medications.

Q Again, this is after, also, this is 8/31/04. I'm looking at a record here from, I think I am, no, that's 8/31. OK. We're on the same page.

A There's a record from September of '04. Another record from September of '04. September of '04 again.

Q We'll put that into the record, Exhibit 6.

DOUG CUMMINS: Which one is that?

Q This is, Exhibit 6 is a document from, excuse me, a letter from Dr. Diane Janowicz. The date at the bottom says, 9 March, '05. There's a record at the top referencing 9/04.

A Where does it say, 9/05?

Q It says, 09 March, '05. There's a record not at the top.

A Right. That was his previous visit. He was only being seen every six months or so.

Q Just to clarify for the test, on Exhibit 7, you've not seen any labels?

A No.

Q You don't know what brand name was on it?

A No.

Q Exhibit 6, and this document that you just provided to me, and this has at the top a note that shows, viral loads one was less than fifty. And it looks like another date to me, less than fifty. Which we would agree that is non-detectable. And then it has CD4 levels at the top, is that correct, on those two?

A Yes.

Q You attribute in your affidavit on page 11, the rising CD4 numbers, to ARD therapy, is that correct?

A Yes.

Q Is there anything else that can cause or allow CD4 levels to rise, other than ARD?

A I'm sure you have a whole list of things.

Q I'm asking you. Do you have knowledge of anything?

A Increase in CD4 levels is what we would expect to see with treating a patient with anti-retroviral therapy.

Q Just to go back, do you know of anything, you know, in your expert opinion do you know of anything that can cause CD4 levels to rise, other than ARD?

A In HIV disease I would expect an increase of -

Q I'm not saying in HIV disease -

A I don't know.

Q Are you aware of anything other than ARD that can cause CD4 counts to rise?

A No, I don't know.

Q What are we looking for?

A We're looking for the CD4 counts in his treatment. When he started. When he stopped.

Q If you put your hands on that, let me know. Do you want me to wait, or do you want me to go ahead?

A No, you can go on.

DOUG CUMMINS: I can look.

Q You then go on on page 11 to reference a medical procedure he had. It looks like he was complaining of abdominal pain?

A Right.

Q Weight loss, diarrhea and I'll let you pronounce this, splenomegaly?

A Uh-huh. Splenomegaly.

Q Is there anything else, other than HIV that causes abdominal pain?

A Oh, of course.

Q Is there anything other than HIV that causes weight loss?

A Of course.

Q Is there anything other HIV that causes diarrhea?

A Of course.

Q Is there anything else other than HIV that causes splenomegaly?

A Yes.

Q What did you do to rule those out, those other causes? You said that these are all commonly seen with HIV.

A They are commonly seen with HIV. I didn't say that they were exclusively seen with HIV.

Q When you say "commonly," how commonly are you talking about? Every half the people, three-quarters of the people?

A You know, I don't know that.

Q Is it, I mean, I'm trying to figure out what you meant by the word, "commonly?"

A This is something that patients with HIV complain about.

G. BARON COLEMAN:I think we're gonna take a short break.

DOUG CUMMINS:I need a second to call a Judge. Sorry. I just wanted to hit someplace where you thought you could stop for a minute.

G. BARON COLEMAN:Do you mind if I go for just another minute?

DOUG CUMMINS:No, go ahead.

Q And then you say here in this document, "His social history continues to confirm "high-risk" behavior."

A Right.

Q What social history are you talking about?

A I didn't put that in there.

Q Is there something on Exhibit 8, that you were pointing to? On 8b, and I'll speed it up. There's a social history section and there's nothing I'm aware of that's high-risk.

A He has a girlfriend who is HIV-positive.

Q Is that high-risk for a person who is HIV-positive?

A So if he, it would be considered high-risk if he were to have a sexual partner who was HIV-positive. If we're assuming that he's not HIV-positive.

Q Are you assuming in your affidavit that he's not HIV-positive?

A No. I'm just saying, this just confirms, this confirms high-risk behavior.

Q But you said just a second ago -

A But he -

Q Let me finish my question. You said a second ago that it's only high-risk, it would be high-risk if he was not HIV-positive. Your affidavit concludes that he is HIV-positive. So what in the social history of document 8, or is there another document that makes you believe that he's continuing to confirm this high-risk?

A It doesn't matter if he's continuing to confirm it or not. It was to continue with the example. That he has participated. He does

participate in high-risk behavior.

Q What high-risk behavior and where are you getting it from?

A That he has a sexual partner who is HIV-positive.

Q And is that high-risk for a person who is HIV-positive?

A When we talk about high-risk, we talk about high-risk for the population in general. It's separate from confirming his HIV-positivity. He has all along had risk factors for HIV. That's all.

G. BARON COLEMAN:Let's take a break.

DOUG CUMMINS:Thanks.

REPORTER'S NOTE:

Short break taken.

DIRECT EXAMINATION CONTINUES

QUESTIONS BY G. BARON COLEMAN

Q Are you ready?

A Sure.

Q We were on -

DOUG CUMMINS:Sorry, that was my fault.

G. BARON COLEMAN:No, no, no. You can't take the whole day off like the rest of us.

Q Let's go to Exhibit 9. Starting with 9a. Do you know who created this document?

A No.

Q Can I look at yours? Mine is not very clear. And yours look fantastic. No, yours isn't either. This looks to me like the same format that was used.

A Yes, it's a communicable disease report.

Q Yes. Is this the same format that was used in 6a?

A I believe so.

Q If I can read 6a, can I assume that the form at least is the same?

A Well, I don't know that either. Because it would depend on if it's a state form, what year. I don't think we can tell that. Let me see.

Q This is four years later. So it's possible that they changed the format.

A Right. So the first form was 2003.

Q This first box, I'm tempted to say on 9a that the first box on the patient history says, sex with male and it's denied. And we talked about that on 6a, that was the only record that you, or I remember coming across.

A Right. Sex with male, yeah, I would agree that that's what that says.

Q There's also an interesting note on 9a, that was denied on 6a. And that is, that he received a blood transfusion in 1980. Did you notice that when you read that?

A Yes, I think that's when he had his motorcycle, I don't know what he had. Maybe it was a gunshot wound, or something.

Q So that's two differences between 9a and 6a. And I only point that out because we don't know who created these and 6a is the only reference we have to sex with a male?

A Right.

Q So I don't know what to make of 6a, But focusing on 9a, a blood transfusion in 1980. Would that be a risk for HIV infection at that early date?

A I wouldn't have considered that a risk. It would probably have depended when in 1980.

Q And I guess the reason I'm focusing on 1980, is because you probably know, or you can tell me, what was the first year to where the symptoms began to be studied and looked at?

A It was, I think 1981, 1982.

Q And 1980 is right in that boarder?

A Yes.

Q And I wanted to draw your attention to that. So in your expert opinion though, you don't have any reason to believe that that transfusion might have been a transmissible root, is that correct?

A I don't, because in 2001, when he had his AIDS, his acute HIV event, they did a testing, an HIV testing and it was negative.

Q Do we have the hospital records from '01?

A Yes.

Q And does it say acute HIV on it?

A No.

Q So this record here from 2001, does not reference HIV, is that correct?

A It does reference HIV.

Q What does it say about HIV?

A They tested him for HIV and they told him to get a followup test, because it was negative.

Q So he had an HIV test in 2001 that was negative?

A Yes.

Q September 29, 2001. And they suggested followup testing?

A Yes.

Q And you keep calling that, I think this is the second or third time you've called that an acute HIV event?

A Yes.

Q If he tested negative why are you calling it HIV related?

A Because it would of been in the window period. We would have expected a negative test.

Q How long does that window period last?

A It can last anywhere from two months to six months. I think there are some more sensitive tests now. That will capture antibodies, positive antibody tests. But I don't really know much about them. Typically we say two to six months.

Q Are you aware of any test, or any study that puts that window period between three and four weeks?

A As I said, I think that there are more sensitive tests now, that are identifying lower levels of antibodies.

Q But you're saying in 2001 you believed it was two to six months?

A Right.

Q I don't want to put this whole thing in the record. Do you know where I can put my finger on the actual HIV test information? We'll put this in as 7. 9b, and I think we've talked about this with respect to the OraQuick test, but I just want to double-check. Have you seen a lab slip

on the test, and if so -

A This is the -

Q That's 10a. And what does this lab slip tell you?

A It tells me that it was a positive Western blot.

Q And have you read the OraSure label?

A No.

Q Have you talked to the lab assistant who processed this?

A No.

Q Have you talked to the doctors?

A No.

Q Do you know, based on this slip when the specimen was drawn? It looks like 11/7/08. And it says, received date 11/11/08. We're still on 10a.

A Yes.

Q Do you know whether four days in transit is prescribed and an acceptable method?

A I don't know.

Q According to the label?

A No.

Q Do you know how it was stored while it was in transit for four days?

A I don't.

Q Do you know how it is suppose to be stored? What temperature it is suppose to be stored at?

A Antibody tests, I think you can store them at room temperature.

Q Is that your expert opinion?

A If we were drawing antibody tests, I mean any time you do labs in my practice, we would put them in the refrigerator during the day. Then we would just stick them in the lab box outside. That's not my expert opinion, but that's just in general antibody tests, I believe.

Q Are you talking HIV antibody?

A No, I'm just talking in general. Mostly measles, mumps, rubella.

Q Do you have an expert opinion on how -

A No, I don't have an expert opinion.

Q HIV tests are suppose to be stored?

A No. Those specifications usually come from the lab.

Q Yeah, they do, and that's why I was asking if you were aware of what those specifications were?

A Right. I am not.

Q And do you know whether they were complied with?

A No, I don't.

Q Do you know whether the doctor was aware of the specifications?

A Do I know that, no.

Q Do you know whether these labels frequently, and I can't state all of them, but do you know whether any of these labels for these test kits state that samples that were stored in improper temperatures are invalid and must be repeated?

A I don't know that.

Q Go back to Exhibit 7, just because I finally have a copy and we'll go out of order. Not your Exhibit 7, this Exhibit 7. This is the one I just received from you, the doctor's note. Just to be clear, this is a physician progress note dated 2001, sometime. It shows an HIV screen is negative, is that correct?

A Yes.

Q And then the second page of this exhibit is a physician progress note dated September 27, 2001, it's handwritten. Also demonstrating a negative HIV test, is that correct?

A Yes.

Q Document 11, on yours, this is, Client Reference Sheet on Duty to Warn. Do you know whether Tony [REDACTED] received a copy of this?

A No, this is done in-person.

Q How do you know that?

A Because Marsha told me.

Q Who's Marsha?

A Marsha is the woman who works at the State Department of Health.

Q Do you know whether she left a copy with him, or whether he just signed it and she brought it back?

A That, I don't know. Do you know?

Q Do you know whether he was under the influence of alcohol or drugs at the time you filled out this document?

A I don't know.

Q Have you checked with anyone to make sure that's his signature? Or, you, yourself know that this is Tony [REDACTED] signature?

A I've seen it on a number of forms. I'm not a handwriting analyst.

Q Document 12, on page 12, of your sheet and also referencing document 12 as an attachment. You say, was diagnosed with syphilis during a contact investigation. Stated he had sex with anonymous women, and he had done so while intoxicated. You reference 13b for that. And then you make a conclusiary statement. "This demonstrates ongoing high-risk behaviors and failure to comply with the duty to warn."

A Yes.

Q If you look at document 13b, it's kinda difficult to see here. It's at the top, under column one, sexual behavior. Do you have 13b?

A Uh-huh.

Q In here it defines sex. Sex is defined as having engaged in oral, anal, or vaginal contact with partners. And it says; Had sex with a male? "No." Had sex with a female? "Yes." Would it be high-risk for Tony [REDACTED] to perform protected oral sex on a female? Would that be considered high-risk behavior?

A Do we know he's had protected sex?

Q Do we know he didn't? It says; Sex is defined as having engaged -

A Considering it's a syphilis investigation, I think that's pretty evident.

Q I'm just going by what the document says. Because you say, you didn't cite syphilis, you cited, had sex with anonymous women and had done so while intoxicated.

A I didn't say that. That was during the, that information was as a result of the syphilis investigation.

Q Where do you see that he failed to comply with his duty to warn on that sheet?

A It doesn't say that he didn't tell them. You're correct.

Q Does it say that he engaged in vaginal intercourse, or anal intercourse with anyone in this, on this document number 13b?

A That's usually assumed with the diagnosis of syphilis. That there's been vaginal intercourse.

Q I'm not asking you to testify what you assume. I'm asking you to testify of what your expert opinion is?

A My expert is a diagnosis of syphilis. That means that there was vaginal intercourse, or anal intercourse.

Q Do you have a previous syphilis test that was negative so that you can tell a time line when he converted from negative for syphilis to positive for syphilis?

A We do have several previous reports.

Q Where are those?

A Those are in his medical record.

Q I mean like right now, where are they?

A Somewhere in this stack.

Q I need to look at them though. We're here to talk about this. I need to put my hands on them and look at the negatives to make sure that the dates line-up and maybe get a time line. I don't want to slow you down though. Based on document 13b, which does not include any syphilis diagnosis that I'm aware of.

A That's on 13a.

Q OK, 13a has a syphilis diagnosis.

A I don't know, but the whole thing is a contact investigation for syphilis.

Q Where do you see that?

A It's a surveillance report.

Q Where are you finding that? I know you're saying that, but where are you finding that?

A Well, I'm saying that's the case because I got this from the STD

investigator. We can ask her to verify that.

Q But as of the date of your affidavit, and as we're sitting here today, you do not have any evidence that you can put your hands on, or that you're aware of that say on a certain date he was negative for syphilis?

A Yes, I do. I do. You asked me a different question.

Q I'm sorry. What did I ask you?

A You asked me about form 13.

Q OK. Yeah, yeah, yeah. The reason I was asking you is, do we have where you can put your hands on something that says he's negative for syphilis at some point, and is later positive for syphilis?

A On this one it's a little bit clearer. You have a DIS number 521 and date first assigned 11/2/2009 and that corresponds to the document 12a, b and c.

Q I'm looking at the document 12a, b and c right now. Where should I be looking on this?

A Your guess is as good as mine.

Q I am not an expert.

A I'm not an expert in our state forms either.

Q You've attached a lot of those.

A I know where I got that, from one of my colleagues. I know where it came from. You're just trying to verify where it came from and I'm trying to help you.

Q I'm not trying to verify. I'm gonna ask for the first time, can I see it?

A Well, if that doesn't have it, a previous negative, I don't know if that has a previous negative.

Q Again, I'm not saying it's not on here. I'm just saying, as of right now I'm not seeing the word syphilis anywhere.

A So on 12b, RPR reactive.

Q Where is that?

A That's syphilis. Disease 700.

Q What line are you looking at?

A We're looking on form 12b, 2/2/2011.

Q OK. The RPR test you have here is the syphilis test?

A Yes.

Q That's reactive. OK, this is after he's in jail. This is 2/2/2011.

A Yes.

Q This is when he's in jail now.

A Exactly. Yes.

Q And this is another one when he's in jail.

A Given that I've done this -

Q I'm saying, do you have one where he was negative before he turned positive? That's what I'm asking.

A Yes. I know, and I'm trying to look for it and you keep going back to the form.

Q You cited 12b to say he was diagnosed with syphilis at Bell Flower Clinic. I'm looking at 12b and I don't see where that happened?

A Wait, I'm sorry, what?

Q You say in your affidavit on page 12, first paragraph, third line. "On 11/2/09 TP was diagnosed with syphilis at Bell Flower Clinic." I'm looking at 12b and I don't see where he was diagnosed with syphilis on 11/2/2009.

A That's the first assigned for interview.

Q You say in your affidavit, on 11/2/2009 TP was diagnosed. And when I was preparing for this, I looked and looked and looked over these documents and could not find it.

A Right here. Patient was diagnosed on 11/2/2009.

Q With what? Is there a key somewhere?

A There isn't a key. I could get you that.

Q But it's your testimony that 700 is syphilis, correct?

A Yes.

Q So as of 11/2/2009 he had syphilis?

A Yes. In here that's confirmed on 12b, 11/2/2009, anti-treponemia reactive.

Q Now do you have a test where he's negative? Because we can see some

time he was tested and did not have syphilis. I want to make sure that the syphilis doesn't go back to 1999, before he had a duty to warn. That's my concern. You're stating that he violated his duty to warn. I don't know that yet. That's why I'm asking these questions. I don't want to sound peculiar for no reason.

A No, that's fine. Go ahead.

Q While you're looking for that, do you want me to go on?

A Yes, we need to wrap this up.

Q While we're talking, let me backup. Do you know what the CDC says is the significance of HIV-positive test results on a Western blot test for people who are asymptomatic, who have no symptoms?

A No.

Q Hypothetically, assume for this hypothetical that the CDC has stated they don't know what a test result of positive means for someone who is asymptomatic? Is that relevant to anything we've talked about today? Is that relevant to the first -

A Say that again.

Q Assume for the sake of this hypothetical that the CDC has stated that the results of a positive HIV Western blot for asymptomatic person -

A In isolation, or after a positive EIA test?

Q Are you aware of anyone who performs Western blot tests without an EIA test?

A I'm just asking you to put that into context for me, please.

Q Let's do the assumption and then we'll work into the hypothetical that the EIA test was reactive, repeatedly reactive. And that a Western blot comes back reactive, but a patient is asymptomatic. And further assume that the CDC has said, we don't know what that means. Does that have any relevance?

A Many patients with HIV, diagnosed with HIV are asymptomatic. So I'm not sure that I understand your question.

Q And I'm saying, the CDC says in that, that they don't know what that mean. And a lot of the test labels say they don't know what that means.

A The documents that I have from the CDC says that that classifies as a diagnosis.

Q After you're done finding that, we'll look for those.

A That's in that one.

Q Going back to 13b and 12a.

A Yes, that's perfect. Thank you very much. And here is the ER report for a syphilis diagnosis.

Q I'm sorry, Doug. What am I looking at here?

DOUG CUMMINS: It says, right underneath, that kinda double-line, go up four lines, it says; syphilis non-reactive.

Q OK. This is September 23, 2004.

DOUG CUMMINS: That's what you're looking for, right?

Q Correct. Assuming that he was non-reactive in September of '04, is there anything in your records that shows that he contracted syphilis during a sexual encounter, in which he failed to warn?

A No.

Q Your affidavit states on 12, "This demonstrates ongoing high-risk behavior and failure to comply with the duty to warn. Is there anything in your notes that does demonstrate that he's failed to comply with the duty to warn?"

A No, I don't think so. If you're looking for, I don't have any documentation of women coming forward at that point and saying that they hadn't been warned.

Q And have you been able to track down anything that explains what these two documents are, 12 and 13?

A Those are reporting forms for STD.

Q Number 15, let's do this one real fast. Let's just do it this way. What do you know about ViroSeq, this test in 15?

A I don't really know anything about it.

Q Do you know whether it's been recalled?

A I don't.

Q If I tell you that it has, do you have any reason to doubt me?

A I don't know.

Q It has. What does a genotype allegedly look for?

A They're looking for dictation, which would render his infection unresponsive to treatment. To help guide antiretroviral therapy.

Q And I think we talked about this earlier. They're looking for protease and reverse transcriptase? Is that what they're looking for?

A There are probably many things that they're looking for actually. And I don't know if those would be the only two.

Q Have you ever seen a list of all the recalled HIV tests?

A No.

Q Is it relevant to any of your findings?

A No.

Q You handed me this document a minute ago titled, "Revised Surveillance Case Definitions" and you suggested that CDC's policy on asymptomatic individuals would be in here.

A I didn't suggest that a policy on asymptomatic individuals. I suggested the definition for HIV infection. It doesn't include symptoms.

Q I'll just ask you. Do you know, do you have any knowledge of what the CDC's policy is on asymptomatic individuals who get HIV tests?

A Having read that document, my thought would be that the CDC does not require patients to be symptomatic for the diagnosis of HIV.

Q Assuming they don't require it, do you know if they've ever made a statement about -

A They may have in the past.

Q You say they may have. Do you know whether or not they have?

A I don't know. It seems very intuitive to me given that this is a virus and folks can be infected with this for years before exhibiting symptoms. Nonetheless, we have the capability of diagnosing HIV infection and monitoring.

Q And you're getting that information from where?

A From medical literature. From articles I've read. From CDC guidance.

Q Do you know any of them off the top of your head?

A No.

Q Have you ever heard the sentence, "Clinical implications of antibodies to HIV-1 in a asymptomatic person are not known?"

A On AIDS denial sites.

Q What about in a genetic systems HIV-1 Western blot test kit, produced by Biorad?

A No.

Q What about in a HIV-1 Western blot test kit produced and manufactured by Cambridge Biotech Corporation?

A No.

Q Would those companies qualify as what you've termed AIDS -

A That would be what I would call medical disclaimer. Which we find commonly in further lab tests also.

Q And not to be ignored? What's the purpose of a disclaimer?

A So that you don't get involved in a lawsuit.

REPORTER'S NOTE:

Short break taken.

G. BARON COLEMAN:I think we're done. Thank you for being here. I'm sorry that I kept you here all day. A little mouse told me that you might have been told it would be an hour or two. And I apologize for that. You have the option to read and sign. Would you like to do that?

DR. JOAN DUWVE: Yes.

G. BARON COLEMAN:Anything else that you want to put on the record before we wrap-up?

DOUG CUMMINS: No.

G. BARON COLEMAN:I would like to move to admit Exhibits 1 through 7.

DOUG CUMMINS: OK.

AND FURTHER THE DEPONENT SAITH NOT.

DR. JOAN DUWVE

DATED